- A written statement by the student's parent or guardian initiating a request to have the medication administered to the student or to have the student otherwise assisted in the administration of the medication, in accordance with the authorized health care provider's written statement. The written statement shall also provide express permission for the School to communicate directly with the authorized health care provider, as may be necessary, regarding the authorized health care provider's written statement.
- In the cases of self---administration of asthma medication or prescription auto-injectable epinephrine, the School must also receive a confirmation from the authorized health care provider that the student is able to self---administer the medication and a written statement from the parent/guardian consenting to the student's self---administration and releasing the School and its personnel from civil liability if the self---administering student suffers an adverse reaction by self---administering his/her medication.

New statements by the parent/guardian and the authorized health care provider shall be required annually and whenever there is a change in the student's authorized health care provider, or a change in the medication, dosage, method by which the medication is required to be taken or date(s), or time(s) the medication is required to be taken. If there is not a current written statement by the student's parent or guardian and authorized health care provider, the School may not administer or assist in administration of medication. The School will provide each parent with a reminder at the beginning of each school year that they are required to provide the proper written statements.

Parent(s)/guardian(s) of students requiring administration of medication or assistance with administration of medication shall personally deliver (or, if age appropriate, have the student deliver) the medication for administration to the Registrar/Office Manager

Responses to the Parent/Guardian upon Request: The School shall provide a response to the parent/guardian within 10 business days of receiving the request for administration and the physician statement regarding which School employees, if any, will administer medication to the student, and what the employees of the School will do to administer the medication to the student or otherwise assist the student in the administration of the medication.

Termination of Consent: Parent(s)/guardian(s) of students who have previously provided consent for the School to administer medication or assist a student with the administration of medication may terminate consent by providing the School with a signed written withdrawal of consent on a form obtained from the office of the Principal.

Authorized Personnel: A nurse who is employed by the School and certified in accordance with Education Code section 44877 will administer or assist in administering the medication to students. If not available, a designated School employee who is legally able to and has consented to administer or assist in administering the medication to students will administer the medication or otherwise assist the students.

Storage of Medication: Medication for administration to students shall be maintained in the office of the School nurse in a locked cabinet. It shall be clearly marked for easy identification.

If the medication requires refrigeration, the medication shall be stored in a refrigerator in a locked office, which may only be accessed by the School nurse and other authorized personnel.

If stored medication is unused, discontinued or outdated, the medication shall be returned to the student's parent/guardian where possible. If not possible, the School shall dispose of the medication by the end of the school year in accordance with applicable law.

Confidentiality: School personnel with knowledge of the medical needs of students shall maintain the students' confidentiality. Any discussions with parents/guardians and/or authorized health care providers shall take place in an area that ensures student confidentiality.

All medication records or other documentation relating to a student's medication needs shall be maintained in a location where access is restricted to the School Director, the School nurse or other designated School employees.

Medication Record: The School shall maintain a medication record for each student that is allowed to carry and self---administer medication and for each student to whom medication is administered or other assistance is provided in the administration of medication.

The medication record shall contain the following: 1) The authorized health care provider's written statement; 2) The written statement of the parent/guardian; 3) A medication log (see below); 4) Any other written documentation related to the administration of the medication to the student or otherwise assisting the pupil in the administra5on of the medication.

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The medication log shall contain the following information: 1) Student's name; 2) Name of the medication the student is required to take; 3) Dose of medication; 4) Method by which the pupil is required to take the medication; 5) Time the medication is to be taken during the regular school day; 6) Date(s) on which the student is required to take the medication; 7) Authorized health care provider's name and contact information; and 8) A space for daily recording of medication administration to the student or otherwise assisting the student, such as date, time, amount, and signature of the individual administering the medication or otherwise assisting in administration of the medication.

Deviation from Authorized Health Care Provider's Written Statement: If a material or significant deviation from the authorized health care provider's written statement is discovered, notification as quickly as possible shall be made as follows: 1) If discovery is made by a licensed health care professional, notification of the deviation shall be in accordance with applicable standards of professional practice; 2) If discovery is made by an individual other than a licensed health care professional, notification shall be given to the School Director, the student's parent/guardian, any School employees that are licensed health care professionals and the student's authorized health care provider.

Specialized Physical Health Care Services for Individuals with Exceptional Needs:
Authorized Personnel: The following individuals may assist students with exceptional needs who require specialized physical health care services during the regular school day:

. Qualified persons who possess an appropriate credential issued pursuant to Education Code sec5ons 44267 or 44267.5
. Qualified designated school personnel trained in the administration of specialized physical health care if they perform those services under the supervision, pursuant to 5 C.C.R. Åò 3051.12, of a credentialed school nurse or licensed physician and surgeon and the services are determined by the credentialed school nurse or licensed physician and surgeon, in consultation with the physician treating the pupil, to include all of the following:
o Routine for the pupil;
o Pose little potential for harm for the pupil;
o Performed with predictable outcomes, as defined in the Individualized Education Program of the pupil;
o Does not require a nursing assessment, interpretation, or decision making by the designated school personnel
. Persons providing specialized physical health care services for students with exceptional needs shall demonstrate competence in basic cardiopulmonary resuscitation and shall be knowledgeable of the emergency medical resources available in the community in which the services are performed.

Specialized health care or other services for students with exceptional needs that require medically related training shall be provided pursuant to the procedures identified in this policy generally.
Specialized physical health care services include catheterization, gastric tube feeding, suctioning or other services that require medically related training.

II. Emergencies
A. First Aid and CPR
All teachers are certified in first aid and CPR and are re---certified every year in either first aid or CPR. Every classroom has a First Aid Kit containing appropriate supplies. First aid will be administered whenever necessary by trained staff members. When necessary, the appropriate emergency personnel will be called to assist.

B. Resuscitation Orders
School employees are trained and expected to respond to emergency situations without discrimination. If any student needs resuscitation, trained staff shall make every effort to resuscitate him/her. The School does not accept or follow any parental or medical "do not resuscitate" orders. School staff should not be placed in the position of determining whether such orders should be followed. The School Director, or his/her designee, shall ensure that all parents/guardians are informed of this policy.

C. Emergency Contact Information
For the protection of a student's health and welfare, the School shall require the parent/ guardian(s) of all students to keep current with the School emergency information including the home address and telephone number, business address and telephone number of the parent/ guardian(s), and the name, address and telephone number of a relative or friend who is authorized to care for the student in any emergency situation if the parent/guardian cannot be reached.

D. Emergency Aid to Students with Anaphylactic Reaction
The School will provide emergency epinephrine auto---injectors to trained School personnel and those trained personnel may use those epinephrine auto---injectors to provide emergency medical aid to persons suffering from an anaphylactic reaction. The training provided to School personnel shall be in compliance with the requirements of Education Code sec5on 49414. Trained School personnel shall immediately administer an epinephrine auto-injector to a person exhibiting potentially life-threatening symptoms of anaphylaxis at School or a School related activity when a physician is not immediately available.

The School Director shall create a plan addressing the following issues: 1) Designation of the individual(s) who will provide the training for administration of emergency epinephrine auto-injectors; 2) Designation of a licensed health care provider or local emergency medical services director for consultation for the prescription of epinephrine auto---injectors; 3) Documentation as to which School personnel will obtain the prescription from the individual identified under subparagraph (2) and the medication from a pharmacist; and 4) Documentation as to where the medication is stored and how the medication will be made readily available in case of an emergency.

III. Head Lice
To prevent the spread of head lice infestations, School personnel shall report all suspected cases of head lice to the School nurse, or designee, as soon as possible. The nurse, or designee, shall examine the student and any siblings of affected students or members of the same household in accordance with the School's health examination policy. If nits or lice are found, the student(s) shall be excluded from attendance and parents/guardians informed about recommended treatment procedures and sources of further information.

In the event of one or more persons infested with lice, an exposure notice with information about head lice shall be sent home to all parents/guardians of the students that have been exposed to the head lice.

School personnel shall maintain the privacy of students identified as having head lice and excluded from attendance.

Excluded students may return to School when reexamination by the nurse, a designee, or other authorized health care representative shows that all nits and lice have been removed. After

returning, the student may be reexamined by the nurse as appropriate to ensure that re-infestation has not occurred.

FERPA
The School, its employees and officers, will comply with the Family Educational Rights and Privacy Act (FERPA) at all times.

Student Records
Einstein Academy will establish and adhere to procedures related to the confidentiality and privacy of student records. In accordance with policies to be adopted by the school's governing Board, Einstein Academy-Elementary School will keep student records in a locked file cabinet to which only designated staff will have keys. Student special education files will be kept in separate locked cabinets to which only staff designated to have access shall have keys. Electronic student information systems will use password-protected accounts to ensure the same limits on access to student files. In the event that a student enters the school upon transfer from an existing district school, the student's records will be requested from the respective district.

Comprehensive Sexual Harassment Policies and Procedures
Einstein Academy is committed to providing a school that is free from sexual harassment, as well as any harassment based upon such factors as race, religion, creed, color, national origin, ancestry, age, medical condition, marital status, sexual orientation, or disability. Einstein Academy will develop a comprehensive policy to prevent and immediately remediate any concerns about sexual discrimination or harassment at the School (including employee to employee, employee to student, and student to employee misconduct). Misconduct of this nature is very serious and will be addressed in accordance with Einstein Academy policy.

DISPUTE RESOLUTION
"The procedures to be followed by the charter school and the entity granting the charter to resolve disputes relating to provisions of the charter." Education Code Section 47605(b)(5)(N).

Intent
The intent of this dispute resolution process is to (1) resolve disputes within the school pursuant to the school's policies, (2) minimize the oversight burden on the Acton-Agua Dulce Unified School District, (3) insure a fair and timely resolution of disputes, and (4) frame a charter oversight and renewal process and timeline so as to avoid disputes regarding oversight and renewal matters. This process does not apply to issues that may trigger the charter revocation process, and therefore preserves the authorizer's statutory to initiate revocation proceedings.

Public Comments
The members of the Board of Directors and the staff of the charter school and the Acton-Agua Dulce Unified School District agree to resolve all disputes regarding this charter school pursuant to the terms of this section. All entities shall refrain from public commentary regarding any

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disputes until the matter has progressed through the dispute resolution process, with the exception of public board meetings as needed to conform to the Brown Act.

Disputes Arising from Within the School

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Disputes arising from within the school, including all disputes among and between students, staff, parents, volunteers, advisors, and partner organizations and Board of Directors members of the school, shall be resolved by the charter school and the Board of Directors pursuant to policies and procedures developed by the charter school Board of Directors.

The Acton-Agua Dulce Unified School District shall not intervene in any such internal disputes without the consent of the Board of Directors of the charter school and shall refer any complaints or reports regarding such disputes to the chairperson of the Board of Directors or the Principal of the charter school for resolution pursuant to the charter school's policies. The restriction on Acton-Agua Dulce Unified School District's intervention in internal disputes shall not limit the authorizer's authority to perform oversight activities provided in law, for example, if the Acton-Agua Dulce Unified School District has reasonable cause to believe that a violation of this charter or related laws or agreements has occurred.

Disputes between the Charter School and the Acton-Agua Dulce Unified School District

Any controversy or claim arising out of or relating to the charter agreement between the District and Einstein Academy, except any controversy or claim that may trigger revocation of this charter once the District has established that grounds for revocation exist and has begun revocation procedures, shall be handled in accordance with the procedures set forth below. Both parties shall make a good faith effort to resolve disputes informally before proceeding to the following steps:

(1) Any controversy or claim arising out of or relating to the charter agreement must be put in writing ("Written Notification") by the party asserting the existence of such dispute. The Written Notification must identify the nature of the dispute and all supporting facts known to the party giving the Written Notification. The Written Notification may be tendered by personal delivery, by facsimile, or by certified mail. The Written Notification shall be deemed received (a) if personally delivered, upon date of delivery to the address of the person to receive such notice if delivered by 5:00 PM or otherwise on the business day following personal delivery; (b) if by facsimile, upon electronic confirmation of receipt; or (c) if by mail, two (2) business days after deposit in the U.S. Mail.

(2) A written response ("Written Response") shall be tendered to the party providing the Written Notification within twenty (20) business days from the date of receipt of the Written Notification. The Written Response shall state the responding party's position on all issues stated in the Written Notification and set forth all fact which the responding party believes supports its position. The Written Response may be tendered by personal delivery, by facsimile, or by certified mail. The Written Response shall be deemed received (a) if personally delivered, upon date of delivery to the address of the person to receive such notice if delivered by 5:00 p.m. or otherwise on the business day following personal delivery; (b) if by facsimile, upon electronic confirmation of receipt; or (c) if by mail, two (2) business days after deposit in the U.S. Mail.

The parties agree to schedule a conference to discuss the claim or controversy ("Issue Conference"). Unless the issue is resolved by mutual agreement through the written communication, an Issue Conference shall take place within fifteen (15) business days from the date the Written Response is received by the other party.

(3) If the controversy, claim, or dispute is not resolved by mutual agreement at the Issue Conference, then either party may request that the matter be resolved by mediation. Each party shall bear its own costs and expenses associated with the mediation, aside from the mediator's fees and the administrative fees of the mediation, which shall be shared equally among the parties. Mediation proceedings shall commence within 60 days from the date of the Issue Conference. The parties shall mutually agree upon the selection of a mediator to resolve the controversy or claim at dispute. If no agreement on a mediator is reached within 30 days after a request to mediate, the American Arbitration Association ("AAA") shall select the mediator.

(4) If the mediation is not successful, the parties agree that each party has exhausted its administrative remedies and shall have any such recourse available by law.

Oversight, Reporting, Revocation, and Renewal

The Acton-Agua Dulce Unified School District Board may inspect or observe any part of the charter school at any time. If the Board of Trustees of the Acton-Agua Dulce Unified School District believes it has cause to revoke this charter, the board agrees to notify the charter school Board of Directors in writing, noting the specific reasonable time to respond to the notice and take corrective action. Einstein Academy understands and accepts that the Board of the Acton-Agua Dulce Unified School District may have legal right to revoke this charter if it has met the grounds for revocation specifically set forth in the law, provided however that Acton-Agua Dulce Unified School District has given Einstein Academy prior notice of any grounds for revocation and reasonable opportunity to cure such violation, unless the Acton-Agua Dulce Unified School District determines, in writing, that the violation constitutes a 'severe and imminent threat to the health or safety of pupils' (EC 47607d). Einstein Academy agrees to respond within 3 days to all reasonable inquiries, including inquiries regarding its financial records.

VI. STUDENT ADMISSIONS, ATTENDANCE, AND SUSPENSION / EXPULSION POLICIES

STUDENT ADMISSION POLICIES AND PROCEDURES

"Admission requirements, if applicable." Education Code Section 47605(b)(5)(H).

The charter school will actively recruit a diverse student population. Students who understand and value the school's mission and are committed to the school's instructional and educational philosophy will be encouraged to apply. Admission to Einstein Academy shall be open to any resident of California that is of legal age to attend public school (e.g., old enough to join kindergarten). Einstein Academy will follow all laws regarding minimum and maximum age for enrollment in a charter school. Pupils will be considered for admission without regard to disability, gender, gender identity, gender expression, nationality, race, ethnicity, religion, sexual orientation, or any other characteristic that is contained in the definition of hate crimes set forth in 422.55 of the Penal Code, or based on association with a person or group with one or more of the above actual or perceived characteristics. Albert Einstein Academy for Letters, Arts and Sciences-Elementary School has no requirement for admission and must admit any child that wishes to apply.

Parents/legal guardians will be asked to attend a voluntary school orientation session, to read the parent-student handbook, and to sign an agreement stating that they understand the policies of Albert Einstein Academy for Letters, Arts and Sciences, and will support these policies at home to help children abide by the rules of the school. No student will be denied admission or continuing enrollment at the school due to his/her parents not attending the orientation or signing the agreement on school policies. Parents are encouraged to volunteer and/or donate to the school; however, no student will be denied admission or continuing enrollment at the school due to his/her parents not volunteering or donating.

Einstein Academy agrees to make any changes to its admissions preferences and/or to its outreach strategies that seek to increase racial and ethnic diversity in the school that are requested by the authorizer and that are compliant with all applicable law, regulation and grant program requirements as indicated by the California Department of Education.

No Admission Testing

Post matriculation, Albert Einstein Academy for Letters, Arts and Sciences-Elementary School may implement academic pre-testing to assess the students' readiness for the grade of entrance and aid in instructional planning; however, such assessments will not be used as a means to prohibit or discourage certain students from attending. Post matriculation, various assessments may be administered to further determine readiness or maintenance of the said grade. Children who are working below grade level or simply need a little extra help may be asked to attend voluntary summer and/or after school programs designed to remediate any deficiencies.

Application and Enrollment Process

The school will establish an annual recruiting and admissions cycle, which shall include reasonable time for all of the following: (1) outreach and marketing, (2) orientation sessions for students and parents, (3) an admissions application period, (4) an admissions lottery, if necessary, and (5) enrollment. The school may fill vacancies or openings that become available after this process using either a waiting list or any other non-discriminatory process.

Albert Einstein Academy for Letters, Arts and Sciences - Elementary School will develop a standardized application form required of all prospective students. Included with the application form will be an information sheet detailing the educational philosophy, discipline policy, and parent participation plan of the Einstein Academy. Parents/legal guardians must sign the application form and will be encouraged to sign the information sheet signifying that they agree to sign a binding contract to abide by those policies should their child be admitted to the school.

Timeline for first year of operation
Applications for admission will be made available by June 1 of the first year and will be due the third Friday in June. The school will hold parent information meetings between January and April so parents can learn more about the school before they apply.

Timeline for subsequent years of operation
Applications for admission will be made available in December of the previous year and will be due by the third Friday in March. The school will hold parent information meetings between January and March so parents can learn more about the school before they apply.

The Lottery and Priority Admissions
If the number of applications for admission to a grade exceeds the number of available slots in that grade, the spaces will be filled by a single random lottery of all grade levels. This lottery will take place during the last week in March (The lottery for opening year 2013 will take place during the last week in June). The lottery will be held in a public setting. Those students who have their name drawn after the number of admission slots to that grade has been filled will be placed on an admission's waiting list for that grade in the order that their name was drawn.

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The following students will be exempt from the lottery: (1) Current students enrolled in the school, (2) siblings, including foster siblings, of children admitted to or enrolled in the school, (3) children of teachers and/or staff, and (4) children of founders. Founders are those parents or guardians who have contributed at least 30 volunteer hours to the school prior to the school's opening. Students exempted from the lottery under items (3) and (4) together will not to exceed 10% of the student population. Parents will be informed of lottery results in writing within 10 days of the lottery. Parents will forfeit their child's space if they fail to enroll their student by the enrollment deadline, tentatively set as July 1.

Weighted preference will be given to students for whom special consideration is required to comply with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 404 of the Rehabilitation Act of 1973, or the Equal Protection Clause of the United

Stated Constitution, with a weight of 2x. All other categories of students will participate in the lottery with no weighted preference.

The Principal or designee will conduct the lottery. Parents will be informed of lottery results in writing within 10 days of the lottery. Parents will forfeit their child's space if they fail to enroll their student by the enrollment deadline, tentatively set for July 1. After the lottery, families will receive their official enrollment forms and will be informed of the enrollment process detailed below.

All applications drawn after reaching capacity will be placed on a wait-list, in the order in which they are drawn.

After the lottery, families will receive their official enrollment forms and will be informed of the enrollment process detailed below. If the number of applications does not exceed the number of spaces available in each grade in the school there will be no lottery, and all students who submitted complete contact information forms will be enrolled.

The Enrollment Process

Each spring, after the lottery for admission, the school will hold orientation meetings for parents. During orientation meetings, staff and parents will review school policies and be asked to sign the family-school agreement and official enrollment papers. The enrollment packet will also include information such as an immunization record and a list of emergency contacts. Parents will also, at this meeting, have the opportunity to sign up with a parent committee through which they can donate volunteer hours to the school. Parents and legal guardians will also receive a family-student handbook during this orientation. This is a mandatory meeting. Parents who cannot make an orientation meeting must make a personal appointment with the charter school's Principal or designee to address the information covered in the meeting.

NON-DISCRIMINATION

"The means by which the school will achieve a racial and ethnic balance among its pupils that is reflective of the general population residing within the territorial jurisdiction of the school District to which the charter petition is submitted." Education Code Section 47605(b)(5)(G).

The school will strive through recruiting efforts to achieve a racial and ethnic balance of students that reflects the general population within the territorial jurisdiction of the Acton-Agua Dulce Unified School District. Einstein Academy will take the following steps designed to attract a diverse applicant pool and enrollment:

- Outreach materials created in Spanish (see attached materials in Spanish; the website will also be translated once its revision is complete – it is undergoing a major overhaul)
- Distribution of outreach materials through community centers, youth programs, social service agencies and/or faith-based organizations serving diverse populations
- Announcements through media outlets serving diverse populations

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- Outreach to diverse community leaders to help them gain an understanding of the school's vision and how it may benefit diverse youth
- Monitor the success of the above steps in achieving the racial and ethnic balance of the District and continue, expand and/or vary the efforts as needed

Einstein Academy has entered into a partnership with the Santa Clarita Valley Latino Chamber of Commerce for the purpose of expanding outreach efforts to the Latino community of Santa Clarita.

Einstein Academy has identified the following media and community partners for targeted outreach in an effort to achieve a reflective racial and ethnic balance. This list will likely be revised and expanded as staff coordinating outreach learns more:

Newspapers/Media - news stories and/or advertisements

The Signal

Los Angeles Daily News

La Opinion

KHTS 1220 AM-Home Town Radio Station

Our Valleys/Nuestros Valles Magazine

Preschools – meetings and/or dissemination of outreach materials

Canyon Springs State Preschool
19059 Vicci St
Canyon Country, CA 91351
(661) 252-8045

Cedarcreek State Preschool
19409 Cedarcreek St Canyon Country, CA 91351
(661) 298-3248

Christ Lutheran Preschool
25816 Tournament Rd
Valencia, CA 91355
(661) 259-0302

Congregation Beth Shalom Preschool
21430 Centre Pointe Pkwy
Santa Clarita, CA 91350

(661) 254-2411

Head Start of Santa Clarita – Old Orchard
25141 Avenida Rondel
Valencia, CA 91355
(661) 290-2829

Head Start of Santa Clarita – Walnut 24823 N. Walnut St
Newhall, CA 91321
(661)253-2035

McGrath State Preschool
21501 Deputy Jake Dr Newhall, CA 91321
(661) 291-4092

Mint Canyon State Preschool
16400 Sierra Highway Canyon Country, CA 91351
(661) 252-8026

Newhall State Preschool
24607 N. Walnut Ave Newhall, CA 91321
(661) 291-6723

Northlake Hills State Preschool
32545 Ridge Route Road Castaic, CA 91384
(661) 257-4500 ext 1520

Peachland State Preschool
24800 Peachland Ave Newhall, CA 91321
(661)1291-4022

Rio Vista State Preschool
20417 Cedarcreek St Canyon Country, CA 91351
(661) 298-3242

St. Stephens Episcopal Church Preschool
24901 Orchard Village Road
Valencia, CA 91355
(661) 259-7307

Val Verde State Preschool
30246 San Martinez Rd
Castaic, CA 91384
(661) 257-9751

Churches - meetings and/or dissemination of outreach materials

Our Lady of Perpetual Help Church
23225 Lyons Avenue
Newhall, CA 91321
661-259-1141

Valencia United Methodist Church
25718 McBean Pkwy
Valencia, California 91355
(661) 255-1301

Blessed Kateri Catholic Church
22508 Copper Hill Drive
Saugus, CA 91350
(661) 296-3180

Other - Dissemination of outreach materials

Saugus Swap Meet, and regional mall - Valencia Town Center.

PUBLIC SCHOOL ATTENDANCE ALTERNATIVES

"The public school attendance alternatives for pupils residing within the school District who choose not to attend charter schools." Education Code Section 47605(b)(5)(L).

No student is required to attend the Albert Einstein Academy for Letters, Arts and Sciences. Students who do not attend the school may attend their local school or pursue an inter-district transfer in accordance with existing enrollment and transfer policies of their district of residence

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Parents or guardians of each student enrolled in the charter school will be informed upon enrollment and within the Student/Parent Handbook that the student has no right to admission in a particular school or program of any local education agency as a consequence of enrollment in Einstein Academy, except to the extent that such a right is extended by the Acton-Agua Dulce Unified School District.

SUSPENSION / EXPULSION PROCEDURES

"The Procedures by which pupils can be suspended or expelled." Education code Section 47605(b)(5)(J).

Einstein Academy will adopt a comprehensive set of disciplinary policies consistent with the contents of this charter petition to detail how the school will address any student conduct issues. This set of policies and procedures will be established to promote learning and protect the safety

and well-being of all students. At least annually, Einstein Academy's Board of Directors will review and modify as needed the school's policies related to suspension and expulsion. This review shall consider input provided by the Principal, who shall conduct a process to review discipline policies and procedures annually. The Principal may change procedures, keeping consistent with any relevant school policies and applicable laws and regulations. Proposed policy changes will go to the full Board for consideration. Staff, parents/guardians and students shall be given an opportunity to provide input and feedback on discipline policies and procedures annually.

Disciplinary procedures will be administered by Einstein Academy staff and Governing Board and thus will not typically involve the Acton-Agua Dulce Unified School District except as part of the normal course of oversight. In the event that Einstein Academy parents, students or staff contact the Acton-Agua Dulce Unified School District regarding a disciplinary matter, Einstein Academy will provide full access to pertinent records to ensure transparent communication with the authorizer about the proceedings in question.

Staff shall enforce disciplinary rules and procedures fairly and consistently amongst all students and accord all students with similar rights to due process. These disciplinary rules and procedures will be printed and distributed as part of the Student Handbook and will clearly describe discipline expectations. In addition to these suspension and expulsion policies required for this charter, prior to completing student enrollment, Einstein Academy will develop a complete set of student discipline policies and procedures which shall be distributed to each student/parent as part of the Student Handbook. The Handbook will describe due process rights with respect to suspension and expulsion. The Handbook will be distributed in English and, when there are at least 5% of non-English speaking parents with the same native language, in that common native language.

Discipline includes, but is not limited to, advising and counseling students, conferring with parents/guardians, detention during and after school hours, the use of alternative educational environments, suspension, and expulsion.

Corporal punishment shall not be used as a disciplinary measure against any student. Corporal punishment includes the willful infliction of, or willfully causing the infliction of, physical pain on a student.

For purposes of the policy, corporal punishment does not include an employee's use of force that is reasonable and necessary to protect the employee, students, staff, or other persons or to prevent damage to the charter school property.

The Principal shall ensure that students and parents/guardians are notified in writing of all discipline policies, rules, and procedures and given an opportunity to provide input and feedback on discipline policies and procedures. Transfer students and their parents/guardian shall be so advised upon enrollment. The notice shall state that these disciplinary rules and procedures are available on request at the charter school office.

Suspended or expelled students shall be excluded from all school-related extracurricular activities unless otherwise agreed during the period of suspension or expulsion.

A student identified as an individual with disabilities pursuant to the Individual with Disabilities Education Act is subject to the same grounds for suspension and expulsion and is accorded the same due process procedures applicable to regular education students except to the extent that federal and state law or the student's Individualized Educational Plan (IEP) mandates additional or different procedures for that student. In the case of the suspension or expulsion of a student who has an IEP, or a student who has a 504 Plan, the school will meet within ten (10) days of suspension to conduct a manifestation determination and to discuss alternative placement in conjunction with the District prior to recommending expulsion for a student with a 504 Plan, Einstein Academy's Principal will convene a link determination meeting to ask the following two questions: A) Was the misconduct caused by, or directly and substantially related to the student's disability? B) Was the misconduct a direct result of the Charter's failure to implement the 504 Plan? Einstein Academy will follow all federal and state laws when imposing any form of discipline on a student identified as an individual with disabilities and accord due process to such students.

Grounds for Suspension and Expulsion of Students

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A student may be suspended or expelled for any of the acts enumerated in this section and related to school activity or school attendance that occur at any time:

- While on school grounds
- While going to or coming from school
- During the lunch period, whether on or off the school campus
- During, going to, or coming from a school-sponsored activity.

Discretionary Suspension

A student may be suspended for the following acts:

- Committed an obscene act or engaged in profanity or vulgarity
- Disrupted school activities or otherwise willfully defied the valid authority of supervisors, teachers, administrators, school officials, or other school personnel engaged in the performance of their duties.

Discretionary Suspension and/or Expulsion

A student may be immediately suspended and/or recommended for expulsion for any of the following acts as enumerated in grounds for suspension or expulsion as specified in EC § 48900:

- Caused, attempted to cause, or threatened to cause physical injury to another person or willfully used force or violence upon the person of another.
- Possessed, sold, or otherwise furnished any firearm, knife, explosive, or other dangerous object, unless, in the case of possession of any object of this type, the

pupil had obtained written permission to possess the item from a certificated school employee, which is concurred by the principal or the designee of the principal.

- Unlawfully possessed, used, sold, or otherwise furnished, or been under the influence of, any controlled substance listed in Chapter 2 of Division 10 of the Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind.
- Unlawfully offered, arranged, or negotiated to sell any controlled, alcoholic beverage, or intoxicant or otherwise furnished to any person another liquid, substance, or material represented as a controlled substance, alcoholic beverage, or intoxicant.
- Committed or attempted to commit robbery or extortion.
- Caused or attempted to cause damage to school property or private property.
- Stolen or attempted to steal school property or private property.
- Possessed or used tobacco, or any products containing tobacco or nicotine products, including, but not limited to, cigarettes, cigars, miniature cigars, clove cigarettes, smokeless tobacco, snuff, chew packets, and betel. However, this section does not prohibit use or possession by a pupil of his or her own prescription products.
- Committed an obscene act or engaged in habitual profanity or vulgarity.
- Unlawfully possessed or unlawfully offered, arranged, or negotiated to sell any drug paraphernalia as defined in Section 1104.5 of the Health and Safety Code.
- Knowingly received stolen school property or private property.
- Possessed an imitation firearm.
- Committed or attempted to commit a sexual assault or committed a sexual battery.
- Harassed, threatened, or intimidated a pupil who is a complaining witness or a witness in a school disciplinary proceeding for the purpose of either preventing that pupil from being a witness or retaliating against that pupil for being a witness, or both.
- Unlawfully offered, arranged to sell, negotiated to sell, or sold the prescription drug Soma.
- Engaged in, or attempted to engage in, hazing as defined in Section 32050.
- Engaged in an act of bullying as defined in EC § 48900(r).
- Aided or abetted in the infliction or attempted infliction of physical injury to another person (suspension only).
- Committed sexual harassment (grades 4-5), EC § 48900.2.
- Caused, attempted to cause, threatened to cause, or participated in the act of hate or violence (grades 4-5), EC § 48900.3.
- Engaged in harassment, threats, or intimidation directed against school district personnel or pupils (grades 4-5), EC § 48900.4.
- Made terrorist threats against school officials, school property or both, EC § 48900.7.

Mandatory Expulsion

Students will be recommended for expulsion for any of the following acts as specified in the EC § 48915:

- Caused serious physical injury to another person except in self defense.
- Possessed, sold or otherwise furnished of any firearm, knife, explosive, or other dangerous object.

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- Brandished a knife at another person.
- Committed or attempted to commit a sexual assault or committed a sexual battery.
- Unlawfully sold or possessed any controlled substance listed in Chapter 2 of Division 10 of the Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind.
- Committed Robbery or extortion.
- Committed Assault or battery upon any school employee.
- Violated the Federal Guns Free Schools Act.

Process for Suspension and/or Expulsion
Suspension shall be imposed only when other means of correction fail to bring about proper conduct. However, a pupil, including an individual with exceptional needs, as defined in Section 56026, may be suspended for any of the reasons enumerated in Section 48900 upon a first offense, if the Principal or Superintendent of Schools determines that the pupil violated subdivision (a), (b), (c), (d), or (e) of EC§ 48900 or that the pupil's presence caused a danger to persons or property or threatened to disrupt the instructional process.

Investigation
After an investigation into the incident, the school shall make a determination as to suspension or recommendation for expulsion. The student will be permitted (1) to provide evidence regarding an incident in a suspension or expulsion and (2) to contact his or her parent. If the student's parent/guardian requests, the student may have up to three (3) additional days to extend the investigation in order to provide evidence. The school shall inform the parent in writing of the administrative decision within three (3) days of the decision. The school may consider evidence at any point during the suspension and expulsion process.

Suspension Conference
The Principal and Assistant Principal have the authority to suspend. Every effort will be made to hold an informal conference prior to suspension with the student and his/her parent. The Principal or designee will conduct the informal conference and will include, whenever practicable, the teacher, supervisor, or school employee who referred the student to the charter school Principal. The conference may be omitted if the Principal determines that an emergency situation exists. An "emergency situation" involves a clear and present danger to the lives, safety, or health of students or school personnel. If the student is suspended without conference, the parent/guardian shall be notified of the suspension and a conference will be requested as soon as possible.

Notice to Parents/Guardians
At the time of the suspension, a charter school employee shall make a reasonable effort to contact the parent/guardian by telephone or in person. Whenever a student is suspended, the parent/guardian shall be notified in writing of the suspension within three (3) days. This notice shall state the specific offense committed by the student. In addition, the notice may also state the date and time when the students may return to school. If school officials wish to ask the parent/guardian to confer regarding matters pertinent to the suspension, the notice may add that state law requires the parent/guardian to respond to such requests without delay. The student and/or the parent/guardian shall be provided the opportunity to present evidence regarding the

incident leading to suspension until the suspension is concluded, or, if requesting an appeal, as part of the appeal process. The notice shall invite the parent/guardian to contact the school if he or she wishes to participate in the return to school after suspension and shall be welcomed to do so.

Appeal of Suspension
Parents can appeal a suspension with a written request within 48 hours of the parent's notification of suspension to Einstein Academy's Board of Directors. The Board selects a committee of three board members who will make a determination about whether to grant the appeal for the suspension within 10 days. The parent/guardian will have the ability to present his or her case for appeal or designate another party to do so on his or her behalf. The decision of the committee of the Board of Directors is final. If the committee of the Board grants the appeal the suspension will not appear on the student's record.

Recommendation for Expulsion
Except for mandatory expulsion offenses, the recommendation for expulsion shall be based on one or both of the following:

- Other means of correction are not feasible or have repeatedly failed to bring about proper conduct.
- Due to the nature of the act, the presence of the pupil causes a continuing danger to the physical safety of the pupil or others (EC § 48915b).
- Disciplinary investigations will include information gathering such as, but not limited to, interviews, documents and other material evidence related to the investigation.

Authority to Expel
The recommendation to expel shall be made by the Principal. The decision to expel shall be made by the expulsion panel or, if on appeal, by the Board of Directors. The expulsion panel may decide to expel any student found to have committed an expellable offense. The expulsion panel will consist of three external community members, including at least one school administrator who has professional knowledge of public school expulsion criteria in addition to preparation to be provided to appeal members to fulfill the role. The panel members shall not be members of the Einstein Academy Board or staff or family members of the student of the student being considered for expulsion.

Expulsion Procedure
A student recommended for expulsion is entitled to a hearing to determine whether the student should be expelled. The hearing shall be held within thirty (30) school days after the charter school Principal or designee determines that one of the acts listed under "Grounds for Suspension and Expulsion" has occurred.

The hearing will be presided over by the Principal who will make a recommendation to the expulsion panel.

Written notice of the hearing shall be forwarded to the student and the student's parent/guardian at least ten (10) calendar days before the date of the hearing. The notice shall include:

- The date, time and place of the hearing;
- A statement of the specific facts, charges and offense upon which the proposed expulsion is based;
- A copy of charter school's disciplinary rules which relate to the alleged violation;
- Notification of the student's or parent/guardian's obligation to provide information about the student's status in charter school to any other district in which the student seeks enrollment;
- The opportunity for the student or the student's parent/guardian to appear in person or to employ and be represented by counsel;
- The right to inspect and obtain copies of all documents to be used at the hearing;
- The opportunity to confront and question all witnesses who testify at the hearing; and
- The opportunity to question all evidence presented and to present oral and documentary evidence on the student's behalf including witnesses.

Special procedures for Expulsion Hearings Involving Sexual Assault or Battery Offenses
Einstein Academy may, upon finding a good cause, determine that the disclosure of either the identity of the witness or the testimony of that witness at the hearing, or both, would subject the witness to an unreasonable risk of psychological or physical harm. Upon this determination, the testimony of the witness may be presented at the hearing in the form of sworn declarations, which shall be examined only by the Einstein Academy Board of Directors, administrative panel. Copies of these sworn declarations, edited to delete the name and identity of the witness, shall be made available to the pupil.

Record of Hearing
A record of the hearing shall be made and may be maintained by any means, including electronic recording, as long as a reasonably accurate and complete written transcription of the proceedings can be made.

Presentation of Evidence
While technical rules of evidence do not apply to an expulsion hearing, evidence may be admitted and used as proof only if it is the kind of evidence on which reasonable persons can rely in the conduct of serious affairs. A recommendation by the expulsion panel to expel must be supported by substantial evidence that the student committed any of the acts listed in "Grounds for Suspension and Expulsion" (refer to above section).

Finding of facts shall be based solely on the evidence at the hearing. While no evidence shall be based solely on hearsay, sworn declarations may be admitted as testimony from witnesses whose disclosure of their identity or testimony at the hearing may subject them to an unreasonable risk of physical or psychological harm.

The decision of the expulsion panel shall be in the form of a recommendation to the charter school Board of Directors, which will make a final determination regarding the expulsion.

Written Notice to Expel

The charter school Principal or designee, following a decision to expel shall send written notice within three (3) days of the decision to expel to the student or parent/guardian. This notice shall include the following:

- The specific offense committed by the student for any of the acts listed in "Reasons for Suspension and/or Expulsion"
- Notice of the student or parent/guardian's obligation to inform any new district in which the student seeks to enroll of the student's status with Einstein Academy
- The reinstatement eligibility review date
- Copy of the rehabilitation plan
- The type of educational placement options during the period of expulsion
- Expulsion Appeal procedures

To substantiate the expulsion decision, a Fact and Findings document will be prepared to summarize the evidence presented at the hearing. If the decision of the Administrative Panel is not to expel, the student shall return to his/her placement at the school.

An expulsion may be appealed within five (5) working days of the expulsion determination. The appeal hearing will be held within ten (10) working days of the appeal request at which time the parent(s)/guardian(s) must attend to present their appeal. The appeal will be heard by the Board of Directors. The Board of Directors will consider the original expulsion proceedings, evidence, and the parent's appeal and make a decision within ten (10) days of the appeal. The decision of the Board of Directors will be final. Einstein Academy will avoid issues typically considered due process issues in non-charter public schools but notes, by law, that charter schools are waived from appeals and accompanying due process considerations. That said, Einstein Academy will happily revise procedures for expulsions and expulsion appeals in accordance with any suggestions made by the District.

If a pupil is expelled or leaves the charter school without graduating or completing the school year for any reason, the charter school shall notify the superintendent of the school district of the pupil's last known address within 30 days, and shall, upon request, provide that school district with a copy of the cumulative record of the pupil, including a transcript of grades or report card, and health information. Any incident of violent and/or serious student behavior shall be communicated to the district/school to which the student matriculates. In the event of a decision to expel a student, the school will work cooperatively with the district of residence, county, and/or charter schools to assist with the appropriate educational placement of the expelled student. If a student is under an expulsion order from another school district (LEA), all information including the student's rehabilitation plan, must be provided to the Board of Directors for review. The Board of Directors will determine if enrollment will be granted.

Rehabilitation Plans

Pupils who are expelled from Einstein Academy shall be given a rehabilitation plan upon expulsion as developed by the charter school's Governing Board at the time of the expulsion

order, which may include, but is not limited to, periodic review as well as assessment at the time of review for readmission. The rehabilitation plan should include a date not later than one year from the date of expulsion when the pupil may reapply to Einstein Academy for readmission.

Readmission

Einstein Academy's Governing Board shall adopt rules establishing a procedure for the filing and processing of requests for readmission and the process for the required review of all expelled pupils for readmission. Upon completion of the readmission process, the Einstein Academy's Governing Board shall readmit the pupil, unless the Einstein Academy's Governing Board makes a finding that the pupil has not met the conditions of the rehabilitation plan or continues to pose a danger to campus safety. A description of the procedure shall be made available to the pupil and the pupil's parent or guardian at the time the expulsion order is entered. All efforts will be made to accommodate returning students.

	1st Trimester (Sept – Nov)	2nd Trimester (Dec – mid-March)	3rd Trimester (mid-March – June)
School-wide Theme	A sustainable world	A just world	A humane world
Thematic Guiding Questions	What behaviors help? How good citizens act. Behaviors of plants and animals; how they meet their needs. How can it help us to have differences? The varied backgrounds of American citizens and residents.	What is the world made of? People, places and environments. Characteristics of water and landforms. Weather has predictable cycles but varies from day to day. How do we get what we need? Basic economic concepts, including individual choice.	What makes this special? Holidays and heroes. Describing the properties of different objects. Comparing solids, liquids and gases. Why do some things change and some things same the same? Across different times and places, life has changed in some ways and stayed the same in others.
ENGLISH-LANG. ARTS	Within heterogeneous classes, students are grouped by instructional need to facilitate their progress at a faster rate than uniform groupings would. This means that they will proceed through the standards at different rates in a continually differentiated curriculum, at times evaluated with school-wide scoring rubrics.		
Reading Students read and understand appropriate material. They use a variety of comprehension strategies. They make progress toward Grade 4 expectation that students will read over ½ million words annually, including narrative and expository text. Students read and respond to a wide variety of significant works of children's literature. They distinguish between the structural features of the text and the literary terms or elements (e.g., theme, plot, setting, characters).	Theme-based literature Guarino, Deborah and Steven Kellogg. Matthew and Tilly; Henkes, Kevin. Chrysanthemum. Fleishman, Paul. Joyful Noise: Poems for Two Voices Cazet, Denys. Never Spit on Your Shoes. Friego, Margot, et al. Tortillitas para Mama. Maestro, Betsy. Coming to America; Lobel, Arnold. Fables. Steptoe, John. Mufaro's Beautiful Daughters: An African Tale; NA. Zookeeper Learns About Responsibility. Steig, William. Amos and Boris. Grade K CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.1 Identify the front cover, back cover. and title page of a book. 1.2 Follow words from left to right and from top to bottom on the printed page. 1.3 Understand that printed materials provide information. 1.4 Recognize that sentences in print are made up of separate words. 1.5 Distinguish letters from words. 1.6 Recognize and name all uppercase and lowercase letters of the alphabet. 1.7 Track (move sequentially from sound to sound) and represent the number, sameness/difference, and order of two and three isolated phonemes (e.g., /f/ s, th/, /j, d, j/).1.8 Track (move sequentially from sound to sound) and represent changes in simple syllables and words with two and three sounds as one sound is added, substituted, omitted, shifted, or repeated (e.g., vowel-consonant, consonant-vowel, or consonant-vowel consonant). 1.9 blend vowel-consonant sounds orally to make word or syllables. Grade 1 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary development 1.1 match oral words to printed words 1.2 Identify the title and author of a reading selection 1.3 identify letters, words and sentences 1.4 distinguish initial, medial, and final sounds in single-syllable words 1.5 distinguish long and short vowel sounds in orally stated single-syllable words 1.9 segment single syllable words into their components.	Theme-based literature Slobodkina, Esphyr. Caps for Sale; Locker, Thomas. Mountain Dance; Root, Phyllis. Grandmother Winter. Yolen, Jane. Letting Swift River Go. Nikola-Lisa W. America: My Land, Your Land, Our Land. Viorst, Judith. Alexander Who Used to Be Rich Last Sunday; Kraus, Robert. Big Squeak. Little Squak; Leo Leonni. It's Mine!; Audrey Wood. Quick as a Cricket. Lionni, Leo. Is Mama a Llama? Grade K CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.9 blend vowel-consonant sounds orally to make word or syllables. 1.14 Match all consonant and short vowel sounds to appropriate letters 1.16 Understand that as letters of words change, so do the sounds. 1.17 Identify and sort common words in basic categories 1.18 describe common objects and events in both general and specific language 2.0 Reading Comprehension 2.1 locate title, table of contents, name of author and name of illustrator Grade 1 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary development 1.6 create a static a series of rhyming words, including consonant blends, 1.11 read common irregular sight words, 1.12 use knowledge of vowel digraphs and r-controlled letter-sound associations to read words 1.13 read compound words and contractions 1.17 Classify grade-appropriate categories of words (e.g., concrete collections of animals, foods, toys) 2.0 Reading Comprehension 2.3 follow one-step written instructions 2.4 use context to resolve ambiguities about word and sentence meanings.	Theme-based literature Sorensen, Lynda. Memorial Day; Howard, Elizabeth Fitzgerald. Chita's Christmas Tree; Borden, Louise. A A. Lincoln and Me; Wong, Janey S. Apple Pie and the Fourth of July. Steele, Philip. Ivan Lapper and Andrew Howat. City Through the Ages; Anno, Mitsumasa. All in a Day; Heide, Florence Parry. The Day of Ahmed's Secret; Bates, Katherine Lee. America the Beautiful; Johnson, Linda Carlson. Our National Symbols; Grade K CCS:1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.10 Identify and produce rhyming words in response to an oral prompt 1.11 Distinguish orally stated one-syllable words and separate into beginning or ending sounds. 1.12 Track auditory each word in a sentence and each syllable in a word. 1.13 Count the number of sounds in syllables and syllables in words. 1.15 read simple one-syllable and high-frequency words 1.15 Read simple one-syllable and high-frequency words (i.e., sight words). 3.0 Literary Response and Analysis 3.1 Distinguish fantasy from realistic text. Grade 1 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary development 1.7 Add, delete or change target sounds to change words 1.8 Blend 2-4 phonemes into recognizable words 1.14 Read inflectional forms and root words 1.15 Read common word families 2.0 Reading Comprehension 2.5 Confirm predictions about what will happen next in a text by identifying key words 2.6 Relate prior knowledge to textual information. 3.2 Describe the roles of authors and illustrators and their contributions to print materials.

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Writing Students write clear and coherent sentences and paragraphs that develop a central idea. Their writing considers audience and purpose. Students progress through the stages of the writing process. Students describe and explain familiar objects, events, and experiences. Student writing demonstrates a	Grade K CCS: 1.0 Reading Comprehension 2.2 Use pictures and context to make predictions about story content. 2.3 Connect life experiences the information and ideas in texts. 2.4 Retell familiar stories. 2. 5 ask and answer questions about essential elements of text 3.0 Literary Response and Analysis 3.2 Identify characters, settings and important events. Grade 1 CCS: 1.0 Reading and Word Recognition 1.10 Generate the sounds from all the letters and letter patterns, including consonant blends and long- and short-vowel patterns (phonograms), and blend them into recognizable words. 1.11 Read common, irregular sight words (e.g., the, have, said, come, does, of). 1.16 Read aloud with fluency that sounds like natural speech 2.0 Reading Comprehension 2.1 identify text that uses sequence or other logical order. 2.2 Respond to who, what, when, where, how questions. 2.3 Retell familiar stories. 3.0 Literary Response and Analysis 3.3 recollect, talk and write about books read during the school year. Grade 2 CCS: Select a focus when writing.	Grade K and 1 CCS: 1.0 Writing Strategies 1.1 Write numerals and lowercase letters of the alphabet independently, attending to the form of letters Grade K CCS: 2.0 Writing Applications 2.1 Write brief narratives describing an experience. 3.1 identify and describe the elements of plot, setting and character in a story, and the story beginning.	Grade K CCS: 1.1 Use letters and phonetically spelled words to write about experiences, stories, people, objects or events Grade 1 CCS: 2.0 Writing Applications 2.2 Write brief expository descriptions of a real object, person, place, or event, using sensory details

VII. FINANCIAL PLANNING, REPORTING, AND ACCOUNTABILITY

BUDGETS

Financial Plan

A financial plan for the school is included in a separate document. This plan is based on the best data available to the developers at the time the plan was assembled. The plan is based on many key assumptions, as outlined in the document. Some of the most basic assumptions include:

1. 336 students in Year 1, with an attendance rate of 95%, growing to 532 students in Year 5

Speaking/ Listening Students listen critically and respond appropriately to oral communication. Students write and speak with purpose, using important ideas with planning, organization, and modulation. Presentations about familiar experiences or interests are organized around a thesis and demonstrate a command of	Grade K CCS: 1.0 Listening and Speaking Strategies 1.1 Understand and follow one and two-step oral directions 2.0 Speaking Applications (Genres and Their Characteristics) 2.1 Recite poems, rhymes, songs and stories. 2.3 Relate an important life event or personal experience in a simple sentence.	Grade K CCS: 1.0 Listening and Speaking Strategies 1.1 Share information and ideas, speaking audibly in complete, coherent sentences. 2.0 Speaking Applications (Genres and Their Characteristics) 2.2 Retell stories using basic story grammar and relating the sequence of story events by answering who, what, where, why and how questions. 2.3 Relate an important life event or personal experience in a simple sentence.	Grade K CCS: 2.0 Speaking Applications (Genres and Their Characteristics) 2.3 Relate an experience or creative story in a logical sequence. Grade 1 CCS: 1.0 Listening and Speaking Strategies 2.0 Speaking Applications 2.4 provide descriptions with careful attention to sensory detail.
	Grade K CCS: 1.0 Written and Oral English Language Conventions 1.1 Recognize and use complete, coherent sentences when speaking. 1.2 Spell independently by using pre-phonetic knowledge, sounds of the alphabet and knowledge of letters Grade 1 CCS: 1.0 Written and Oral English Language Conventions 1.1 Write and speak in complete, coherent sentences		

2. Funding rates based on the most recent projected charter school funding rates with very conservative cost-of-living adjustments starting in the third year
3. A student to teacher ratio of 28:1 in the core classrooms (lower, if counting the additional foreign language teachers in the ratio; ratios will also be lower if and when Class Size Reduction funding is restored for new schools).

FINANCIAL AND PROGRAMMATIC REPORTING

Budget and Financial Reporting Schedule
Einstein Academy will annually prepare and submit to the Acton-Agua Dulce Unified School District:

- On or before July 1st, a final budget. For a charter school in its first year of operation, financial statements submitted with the charter petition pursuant to Education Code 47605(g) will satisfy this requirement.
- On or before July 1st, an annual update required pursuant to Education Code Section 47606.5.
- On or before December 15th, an interim financial report which reflects changes to the final budget through October 31st
- On or before March 15th, a second interim financial report which reflects changes to the final budget through January 31st
- On or before September 15th, a final unaudited financial report for the prior full fiscal year

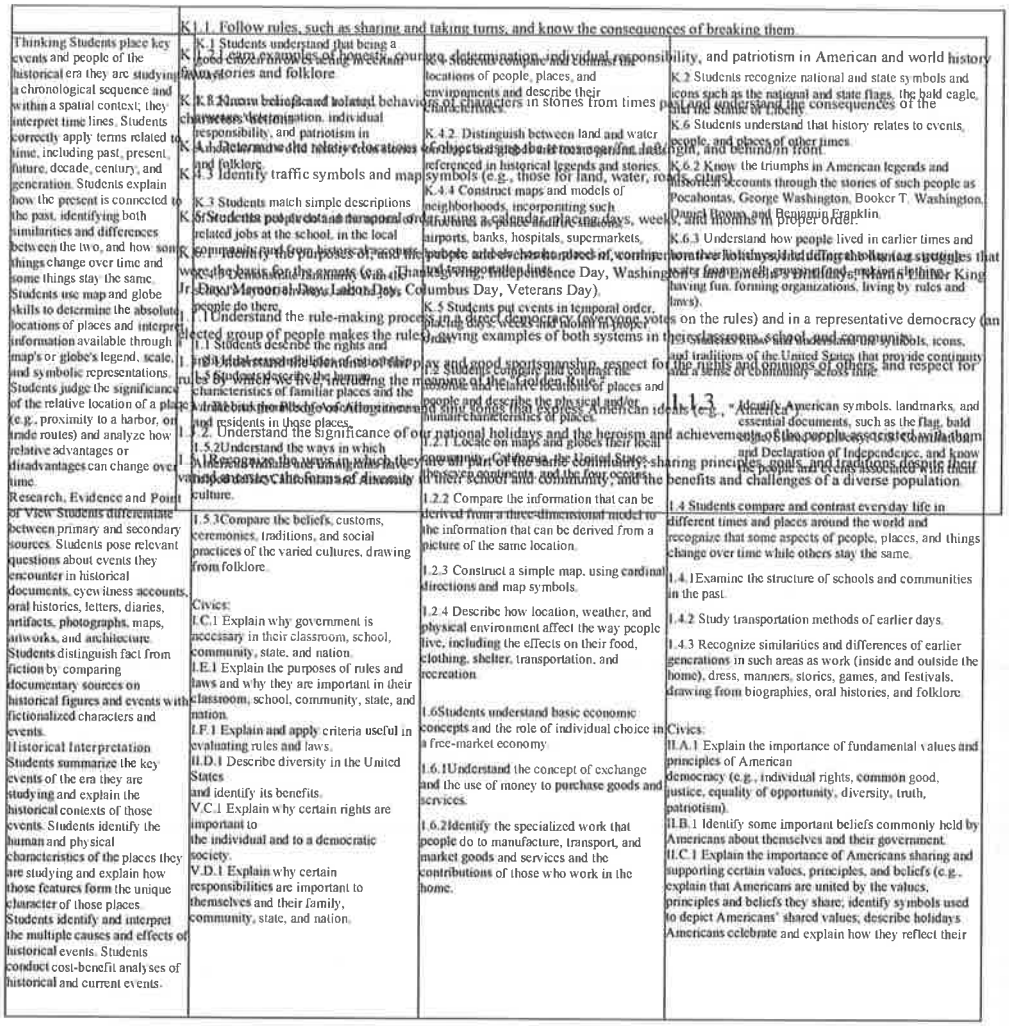
HISTORY-SOCIAL SCIENCE: Analysis and Social Science Skills Chronological and Spatial	Kindergarten: Working Now and Long Ago Grade 1: A Child's Place in Time and Space Grade 1 CCS: SL.1 Listening and Speaking Strategies Listen attentively. 1.2 Ask questions for clarification and understanding, 1.3 Give, restate, and follow simple two-step directions, 1.5 Use descriptive words when speaking about people, places, things and events.

- On or before December 15th, the independent auditor's report for the prior fiscal year ending June 30th

The annual budget and interim reports will be provided in electronic form and will display the School's revenues and expenditures, by major object code, using the Standardized Account Code Structure, along with projected ending balances and reserves. The unaudited actual financial report will be prepared using the Charter Alternative Form posted on the California Department of Education web site. The Board and staff will use these and other reports to regularly monitor the school's financial status and will take appropriate actions to ensure that the school's budgets remain balanced and cash flow remains positive.

OTHER FINANCIAL REPORTS

Einstein Academy will implement an attendance recording and accounting system that complies with state law.



Einstein Academy anticipates applying for the Charter School Revolving Loan Fund. If it does so, Einstein Academy understands that it must comply with Education Code section 41365 if it receives funds.

Einstein Academy will be a directly funded charter school. Einstein Academy anticipates depositing its funds in a non-speculative and federally insured bank account for use by the school.

SCIENCE	Grade K Life Sciences: 2. Different types of plants and animals inhabit the earth. Grade 1 Life Sciences: 2. Plants and animals meet their needs in different ways.	Grade K Earth Sciences: 3. Earth is composed of land, air, and water. Grade 1 Earth Sciences: 3. Weather can be observed, measured, and described.	Grade K Physical Sciences: 1. Properties of materials can be observed, measured, and predicted. Grade 1 Physical Sciences: 1. Materials come in different forms (states), including solids, liquids, and gases.
	Investigation and Experimentation: Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will: Grade K: a. Observe common objects by using the five senses. b. Describe the properties of common objects. c. Describe the relative position of objects by using one reference (e.g., above or below). d. Compare and sort common objects by one physical attribute (e.g., color, shape, texture, size, weight). e. Communicate observations orally and through drawings. Grade 1: a. Draw pictures that portray some features of the thing being described. b. Record observations and data with pictures, numbers, or written statements. c. Record observations on a bar graph. d. Describe the relative position of objects by using two references (e.g., above and next to, below and left of). e. Make new observations when discrepancies exist between two descriptions of the same object or phenomenon.		
MATH	Students are grouped by instructional need to facilitate their progress at a fastest rate that uniform groupings would. Students progress sequentially through the California's Common Core State Standards from Grade K to Grade 1, in a curriculum that follows the order of the textbook.		

Einstein Academy's Principal will work with school staff and the contracted business services provider (see Administrative Services, below) to prepare the following reports that are required by law: California Basic Educational Data System (CBEDS), actual Average Daily Attendance reports, and School Accountability Report Card (SARC).

INSURANCE

The Acton-Agua Dulce Unified School District shall not be required to provide coverage to Einstein Academy under any of the Acton-Agua Dulce Unified School District's self-insured programs or commercial insurance policies. The charter school shall secure and maintain, as a minimum, insurance as set forth below to protect Einstein Academy from claims which may arise from its operations. The following insurance policies are required:

1. Workers' Compensation Insurance in accordance with provisions of the California Labor Code, adequate to protect Einstein Academy from claims under Workers' Compensation Acts, which may arise from its operations.
2. General Liability, Comprehensive Bodily Injury, Property Insurance and Property Damage Liability for combined single limit coverage of not less than $3,000,000 for each occurrence. The policy shall be endorsed to name the Acton-Agua Dulce Unified School District and its Board of Trustees as additional insured.
3. Fidelity Bond coverage shall be maintained by Einstein Academy to cover all charter school employees who handle, process, or otherwise have responsibility for charter

school funds, supplies, equipment or other assets. Minimum amount of coverage shall be $50,000 per occurrence, with no self-insured retention.

4. Directors and Officers insurance with a limit of no less than $2,000,000.

Einstein Academy will ensure that auto insurance and auto liability insurance is maintained on any vehicles owned or used by the school. Einstein Academy will also maintain any other types of insurance and coverage limits as required by the Acton-Agua Dulce Unified School District.

Insurance Certificates

Einstein Academy shall keep on file certificates signed by an authorized representative of the insurance carrier. Certificates shall be endorsed as follows: The insurance afforded by this policy shall not be suspended, cancelled, reduced in coverage or limits or non-renewed except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Acton-Agua Dulce Unified School District. Facsimile or reproduced signatures are not acceptable. The Acton-Agua Dulce Unified School District reserves the right to require complete certified copies of the required insurance policies.

Optional Insurance

Should Einstein Academy deem it prudent and/or desirable to have insurance coverage for damage or theft to school, employee or student property, for student accident, or any other type of insurance coverage not listed above, such insurance shall not be provided by the Acton-Agua Dulce Unified School District and its purchase shall be the responsibility of the charter school.

Indemnification

With respect to its operations under this charter, Einstein Academy shall, to the fullest extent permitted by law, hold harmless, indemnify, and defend the Acton-Agua Dulce Unified School District, its officers, directors, and employees from and against any and all claims, demands, actions, suits, losses, liability expenses and costs including, without limitation, attorneys' fees and costs arising out of injury to any persons, including death or damage to any property caused by, connected with, or attributable to the willful misconduct, negligent acts, errors or omissions of Einstein Academy or its officers, employees, agents and consultants, excepting only those claims, demands, actions, suits, losses, liability expenses and costs caused by the negligence or willful misconduct of the Acton-Agua Dulce Unified School District, its officers, directors and employees. The Acton-Agua Dulce Unified School District shall be named as an additional insured under all insurance carried on behalf of Einstein Academy as outlined above.

ADMINISTRATIVE SERVICES

As noted above, Einstein Academy anticipates entering into an agreement with Acton-Agua Dulce Unified School District to contract business services on a fee-for-service basis, potentially including some or all of the following services:

- General accounting: Pay bills, file documents for AP and AR, make bank deposits, record cash deposits, record payroll transactions, maintain the chart of accounts, reconcile revolving activities, manage users in the accounting system

- Financial reporting and month-end financial processes: Reconcile bank and credit card accounts, reconcile balance sheet, verify transactions recorded, monitor Einstein Academy financial activities & make recommendations, present financial information to the Board of Directors, monitor cash flow and take steps to prevent any potential deficiencies
- Budget development and revision: Create and revise budgets at least three times per year, enter approved budgets in accounting system, prepare multi-year budgets & cash flows as needed, assist with the financial audit
- Attendance accounting: Complete monthly attendance reports, complete Statistical Summary reports P1, P2 and annual report
- Payroll and human resources: Process payroll, maintain payroll records, complete and submit any STRS information
- School compliance: Complete 1st & 2nd interim reports and unaudited actual report, prepare year-end financial report and correspond with auditors, submit funding survey, complete CSR reports

Einstein Academy intends to enter into a contract for business services by creating an RFP identifying the services desired and distributing it to a range of business service providers, comparing estimated fees from each provider, contacting current clients of top providers for their feedback, and discussing findings with respect to the Board's criteria for selection. This criterion will include current client satisfaction, accuracy of work, quality of financial and compliance oversight, ease of use of systems, and ability to support school personnel on an ongoing basis. Einstein Academy will coordinate with the Acton-Agua Dulce Unified School District to report pertinent STRS payroll data. The Acton-Agua Dulce Unified School District may request a reasonable fee for coordinating this transfer of data. The school plans to obtain its own health and benefits via small business plan type offerings from local vendors (e.g., Kaiser and Blue Cross).

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FACILITIES

During its first few years of operation, Einstein Academy plans to lease facilities. The founding group's intent has been to lease a site in the attendance area of the Acton-Agua Dulce Unified School District. After a thorough search by qualified real estate professionals, no suitable site currently exists in the attendance area of the Acton-Agua Dulce Unified School District (Please see appendix with letter from Realtor). However, appropriate facilities have been found in one site (the Charter School has identified two different options) nearby in a neighboring community that ideally suits the needs of the proposed school. The space is more than adequate, both on the interior of the building, as well as property outdoors for a play area. It has the proper zoning and is very favorable priced. In particular, Einstein Academy is considering a facility located at 22040 Placeritos Boulevard in Santa Clarita, or at 20417 Cedarcreek St in Canyon Country.

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With 3 classes per grade, a site with 21 classrooms plus space for a large Multi-purpose room, cafeteria, outdoor eating area, science lab and media lab are needed. The facility identified meets those needs. In addition, they are suitable to house a school as they do not lie near facilities that use toxic chemicals or near businesses that engage in business activities not

suitable for students (e.g. alcohol, tobacco, "adult" entertainment, etc.). They are also far enough away from freeways, rail lines and other items that would be in violation of establishing a school site.

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In the longer term, it is the goal of Einstein Academy to build a new school facility in the Acton-Agua Dulce Unified School District area that will be specifically designed to meet the needs of all students enrolled at the school.

All facilities and sites will meet federal, state, and local building codes and requirements applicable to California charter schools prior to the site being used by the Einstein Academy.

TRANSPORTATION

Einstein Academy does not anticipate providing home-to-school or school-to-home transportation services; however, Einstein Academy will cooperate with the Acton-Agua Dulce Unified School District and its SELPA to ensure that students with IEPs that require such services receive them. Einstein Academy does anticipate occasionally arranging for public, rented or parental transportation for field trip-type excursions and learning opportunities.

AUDITS

"The manner in which an annual, independent, financial audit shall be conducted, which shall employ generally accepted accounting principles, and the manner in which audit exceptions and deficiencies shall be resolved to the satisfaction of the chartering authority." Education Code Section 47605 (b) (5) (I)

The Einstein Academy Board of Directors will contract and oversee the work of an independent auditor to ensure the completion of an annual audit of the school's financial affairs.

Each audit shall be made by a certified public accountant selected from the directory of certified public accountants designated by the State Controller's Office as active to conduct audits of local education agencies. This auditor will have experience with audits of educational entities and education finance, preferably with charter schools. The scope of the audit will include all elements mandated by the Audit Guide regulations promulgated by the Education Audit Appeals Panel as applicable to charter schools and any other elements as required by applicable law. The audit will be conducted in accordance with generally accepted accounting principles applicable to the school and will verify the accuracy of the school's financial statements, average daily attendance and enrollment accounting practices, and review of the school's internal controls. By December 15th of each year, the annual audit will be completed and a copy of the auditor's findings will be forwarded to the charter-granting agency, the County Superintendent of Schools, the State Controller, and the Superintendent of Public Instruction.

Einstein Academy will observe the following audit timeline:

- By April 1 prior to the close of the fiscal year, the Board will contract the independent auditor
- By December 15 after the close of the fiscal year, the annual audit including corrective action plans will be completed and a copy of the auditor's findings will be forwarded to the charter-granting agency, the County Superintendent of Schools, the State Controller, and the Superintendent of Public Instruction
- By January 31 after the close of the fiscal year, the Board will review the audit in a public meeting
- By February 25 after the close of the fiscal year, the County will review any corrective actions and identify any needed additional follow-up
- By March 15 after the close of the fiscal year, the District will respond to any remaining County follow-up issues
- By May 15 after the close of the fiscal year the County Superintendent will review and certify any corrective action plans

The school's audit committee will review any audit exceptions or deficiencies and report to the school's Board of Directors with recommendations on how to resolve them. The Board will report to the charter-granting agency regarding how the exceptions and deficiencies have been or will be resolved. In addition, the charter granting agency's primary factor when deciding whether an audit exception or deficiency is resolved is whether the auditor considers the item resolved; however, the charter granting agency may reserve the right to only consider an item resolved once the charter granting agency believes the item is resolved to its satisfaction (EC 47605(b)(5)(I)). Einstein Academy will resolve outstanding issues from the audit prior to the completion of the auditor's final report.

CLOSURE PROTOCOL

"A description of the procedures to be used if the charter school closes. The procedures shall ensure a final audit of the school to determine the disposition of all assets and liabilities of the charter school, including plans for disposing of any net assets and for the maintenance and transfer of pupil records." Education Code Section 47605(b)(5)(P).

If the school ceases operation, the school shall designate an entity or individual to be responsible for conducting closure activities. The designated entity or individual shall be known as the Authorized Closer and shall be the Einstein Academy Board of Directors. The decision to close Einstein Academy either by the school's governing board or by the Acton-Agua Dulce Unified School District Board will be documented in a Closure Action. The Closure Action shall be deemed to have been automatically made when any of the following occur: the charter is revoked or non-renewed by the Acton-Agua Dulce Unified School District Board of Education; the charter school board votes to close the school; or the charter lapses. Within 72 hours of the Closure Notice, the Authorized Closer shall commence closure proceedings by providing written

notification to parents and guardians of pupils, SBE, the Acton-Agua Dulce Unified School District, the Los Angeles County Office of Education, the SELPA in which the school participates, the retirement systems in which the school's employees participate, and the California Department of Education.

The notice shall include the effective date of the closure ("Closure Date"), the party to contact for information related to the closure, the pupil's districts of residence and the manner in which parents and guardians may obtain copies of pupil records, including information on completed courses and credits that meet graduation requirements. The school shall provide the Authorized Closer with a list of pupils in each grade level and the classes they have completed, together with information on the pupils' districts of residence. Notification to the CDE will also include a description of the circumstances of the closure and the location of student and personnel records. In addition to the four required items above, notification to parents, guardians, and students will also include:

1. Information on how to transfer the student to an appropriate school and a process for the transfer of all student records. The charter school will provide the District with original cumulative files pursuant to District policy for all students both active and inactive at the charter school. Parents will be provided with a copy of their child's cumulative records from the charter school.
2. A certified packet of student information that includes closure notice, a copy of their child's cumulative record which will include grade reports, discipline records, immunization records, completed coursework, credits that meet graduation requirements, a transcript, and State testing results

Pupil records, including all state assessment results and special education records, shall be maintained and transferred to the custody of the Authorized Closer, except for records and/or assessment results that, under the provisions of the governing charter, are required to be transferred to a different entity.

Personnel records shall be maintained and transferred in accordance with applicable law. Prior to final closure, Einstein Academy will do all of the following on behalf of the school's employees, and anything else required by applicable law:

a. File all final federal, state, and local employer payroll tax returns and issue final W-2s and Form 1099s by the statutory deadlines.
b. File the Federal Notice of Discontinuance with the Department of Treasury (Treasury Form 63).
c. Make final federal tax payments (employee taxes, etc.)
d. File the final withholding tax return (Treasury Form 165).
e. File the final return with the IRS (Form 990 and Schedule).

The charter school shall announce the closure to any school districts that may be responsible for providing education services to the former students of the charter school within 72 hours of the decision to Closure Action. This notice will include a list of returning students and their home

schools. Charter school closures should occur at the end of an academic year if it is feasible to maintain a legally compliant program until then.

The charter school will update all student records in the California Longitudinal Pupil Achievement Data System (CALPADS) prior to closing.

For six (6) calendar months from the Closure Action or until budget allows, whichever comes first, sufficient staff as deemed appropriate by the Einstein Academy Board, will maintain employment to take care of all necessary tasks and procedures required for a smooth closing of the school and student transfers.

The school shall complete an independent final audit within six months of the school's closure. The audit may also serve as the annual audit. The audit must include at least the following:

- An accounting of all assets, including cash and accounts receivable and an inventory of property, equipment and supplies.
- An accounting of the liabilities, including accounts payable and any reduction in apportionments as a result of audit findings or other investigations, loans and unpaid staff compensation.
- An assessment of the disposition of any restricted funds received by or due to the school.

The Authorized Closer must provide for the completion and filing of any annual reports required by Ed. Code section 47604.33.

Prior to the distribution of any remaining net assets of the school, the Authorized Closer shall:

- determine if there are any remaining proceeds of any Restricted Government Grant that have not been expended for the purposes set forth in the Restricted Government Grant, and shall return any such remaining proceeds to the applicable federal or California governmental agency; and
- dispose of, distribute or otherwise utilize any proceeds of any grants or donations (whether in cash or in-kind (i.e., materials or property) received by the school or the school corporation from any private foundation, any other entity exempt from tax under Section 501(c)(3) of the Internal Revenue Code, as amended, any other person, or the general public in accordance with the restrictions, if any, imposed by the grantor or donor on such grants or donations at the time received by the school or the school corporation.

For purposes of subparagraph (a) above, "Restricted Government Grant" means any grant or donation, in cash or in-kind (i.e., materials or property), made by any federal or California governmental agency to the school or the school corporation, the grant instrument of which, or the applicable law governing, requires that, upon closure of the school or dissolution of the school corporation, any proceeds of such Restricted Government Grant that have not been expended for the purposes set forth in the grant instrument or in applicable law, be returned to

the granting or donating governmental agency. The school shall use, but is not limited to, school reserves normally maintained for contingencies and emergencies to fund closure proceedings. Any return of funds will include submission, if required, of final expenditure reports for entitlement grants and the filing of any required final expenditure reports or final performance reports. Any donated materials or property shall be returned in accordance with any conditions established when the donation of such materials or property was accepted.

The school is a California nonprofit public benefit corporation (as permitted under Ed. Code section 47604(a) ("school corporation"). If in connection with the closure, the Board determines that it will dissolve the school corporation ("Dissolution"), then (i) the Dissolution shall be conducted in accordance with the requirements of the California Nonprofit Public Benefit Corporation Law ("Law") including, without limitation, Corp. Code sections 6610 et seq. and sections 6710 et seq., and (ii) the Board may select the Authorized Closer to assist with the wind-up and Dissolution of the school corporation. Any net assets remaining after all debts and liabilities of the school corporation (i) have been paid to the extent of the school corporation's assets, or (ii) have been adequately provided for, shall be distributed in accordance with the school corporation's Articles of Incorporation, with recipients of net assets restricted to California public schools.

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VIII. IMPACT ON THE CHARTER AUTHORIZER

This section is intended to satisfy the requirement of Education Code section 47605(g) that the charter school provide the charter authorizing agency with a district impact statement. This section provides information regarding the proposed operation and potential effects of Einstein Academy on the Acton-Agua Dulce Unified School District.

Administrative Services

The Einstein Academy will be constituted as a California nonprofit public benefit corporation and will be governed by a Board of Directors as described above. A school Principal will have lead responsibility for administering the school under policies adopted by the school's Board of Directors. The school anticipates that it will provide most of its own administrative services independent of the Acton-Agua Dulce Unified School District. These include financial management, personnel, and instructional program development. If Einstein Academy desires to purchase any administrative services from the Acton-Agua Dulce Unified School District, Einstein Academy will seek to define the specific terms and cost for any such services in an annual memorandum of understanding with the Acton-Agua Dulce Unified School District. In addition, the Acton-Agua Dulce Unified School District is required as per California law to provide oversight and performance monitoring services, including monitoring school and student performance data, reviewing the school's audit reports, performing annual site visits, engaging in any necessary dispute resolution processes, and considering charter amendment and renewal requests.

Civil Liability

The Einstein Academy will be formed as a California nonprofit public benefit corporation with IRS 501c3 tax exemption status. As such, the school's founders presume that the Acton-Agua Dulce Unified School District will not be liable for the debts or obligations of the charter school pursuant to Education Code Section 47604(c). In the event that the Acton-Agua Dulce Unified School District does not complete its responsibilities for charter school oversight under the Charter Schools Act, the Acton-Agua Dulce Unified School District may expose itself to liability. The school intends to purchase liability and property insurance as outlined above to protect the school's assets, staff, Board of Directors members, and, where appropriate, Acton-Agua Dulce Unified School District personnel.

IX. ADDITIONAL CLAUSES

Term
The term of this Charter shall be 1st of July 2013 through the 30th June 2018. This Charter may be renewed for one or more subsequent five (5) year terms upon the mutual agreement of the parties.

Revisions
Material revisions of the provisions contained in this Charter may be made in writing with the mutual consent of the Acton-Agua Dulce Unified School District Board of Trustees and the Einstein Academy Board of Directors. Material revisions and amendments shall be made pursuant to the standards, criteria, and timelines in Education Code Section 47605; provided, however, that the charter school shall not be required to obtain petition signatures prior to making material amendments to the charter petition.

Severability
The terms of this charter are severable. In the event that any of the provisions are determined to be unenforceable or invalid for any reason, the remainder of the charter shall remain in effect, unless mutually agreed otherwise by the respective boards of Einstein Academy and the Acton-Agua Dulce Unified School District. The Acton-Agua Dulce Unified School District and school agree to meet to discuss and resolve any issues or differences relating to invalidated provisions in a timely, good faith fashion.

Miscellaneous
The Acton-Agua Dulce Unified School District and the charter school shall engage in a mutually agreeable MOU, which outlines further details of the relationship between the Acton-Agua Dulce Unified School District and the charter school.

The MOU shall include, but not be limited to, the following:

Services to be purchased by the charter school from the Acton-Agua Dulce Unified School District, and the fee schedule for such services, transportation and food services to be provided by the Acton-Agua Dulce Unified School District, if any, special education services and funding formulas, hold harmless indemnification, if required by the Acton-Agua Dulce Unified School District, charter school's receipt of mandated cost reimbursement, fiscal reporting requirements to the state, either independently or through the Acton-Agua Dulce Unified School District, and Acton-Agua Dulce Unified School District support for the charter school in seeking additional funding.

The charter school may procure administrative services from the Acton-Agua Dulce Unified School District, including site budgeting, instructional programs, development, custodial services, and food services accounting, payroll and purchasing services and some degree of personnel support. Specific terms of most of these services should be covered by the memorandum of understanding. The Acton-Agua Dulce Unified School District will also be

expected to provide oversight and performance monitoring services, including the monitoring of school and student performance data, reviewing the financial statement and audit reports of the school and of AEALAS, Inc., performing annual site visits, and considering charter amendment and renewal requests.

This MOU will delineate the liability of the Acton-Agua Dulce Unified School District if Einstein Academy should default. As a nonprofit organization, Einstein Academy anticipates that Acton-Agua Dulce Unified School District's liability will be minimal as long as the Acton-Agua Dulce Unified School District performs its oversight functions, according to law.

Einstein Academy reserves the rights to purchase additional administrative or other goods or services from any third party as needed.

This MOU will delineate that the Einstein Academy and the Acton-Agua Dulce Unified School District will collaborate to create dependent charter(s) beginning in September 2014

Communication
All official communication between the charter school and the Acton-Agua Dulce Unified School District will be sent via first class mail or other appropriate means to the Superintendent of the Acton-Agua Dulce Unified School District.

Assurances
ALBERT EINSTEIN ACADEMY FOR LETTERS, ARTS AND SCIENCES:

1. Will meet all statewide standards and conduct the student assessments required, pursuant to Education Code §60605, and any other statewide standards authorized in statute, or student assessments applicable to students in non-charter public schools. [Ref. California Education Code §47605(c)(1)]
2. Will be deemed the exclusive public school employer of the employees of the charter school for the purposes of the Educational Employment Act (Chapter 10.7 (commencing with §3540) of Division 4 of Title 4 of Title 1 of the Government Code. [Ref. California Education Code §47605(b)(5)(O)]
3. Shall be nonsectarian in its programs, admission policies, employment practices, and all other operations, shall not charge tuition, and shall not discriminate against any pupil on the basis of the characteristics, whether actual or perceived, as listed in Education Code section 220, including, but not necessarily limited to the following: disability, gender, gender identity, gender expression, nationality, race, ethnicity, religion, sexual orientation, or any other characteristic that is contained in the definition of hate crimes set forth in 422.55 of the Penal Code, or based on association with a person or group with one or more of the above actual or perceived characteristics. [Ref. California Education Code §47605(d)(1)]
4. Will not charge tuition. [Ref. California Education Code §47605(d)(1)]
5. Will admit all students who wish to attend the school, and who submit a timely application, unless the school receives a greater number of applications than there are spaces for students, in which case each applicant will be offered a chance of admission through a random lottery process. [Ref. California Education Code §47605(d)(2)(B)]

6. Will adhere to all provisions of federal law relating to students with disabilities, including the IDEA, Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Act of 1990, that are applicable to it.
7. Will meet all requirements for employment set forth in applicable provisions of law, including, but not limited to credentials, as necessary. [Ref. Criteria for Review, §11967.5.1(f)(5)]
8. Will ensure that teachers in the school hold a Commission on Teacher Credentialing certificate, permit, or other document equivalent to that which a teacher in other public schools are required to hold. As allowed by statute, flexibility will be given to non-core, non-college preparatory teachers. [Ref. California Education Code §47605(l)]
9. Will at all times maintain all necessary and appropriate insurance coverage.
10. Will be located at a facility within the boundaries of the school District [Ref. California Education Code §47605(a)(4)]
11. Will follow any and all other federal, state, and local laws and regulations that pertain to the applicant or the operation of the charter school.

APPENDIX A. Academic Calendar

Einstein Academy expects all students to attend school every day they are not ill. There are no particular attendance requirements, aside from that expectation. The Einstein Academy will not hold classes on federal holidays. Einstein Academy anticipates the following academic and schedule for the 2013-14 school year:

Anticipated first day of school 2013: August 19, 2013
Anticipated last day of school2014: June 13, 2014
Anticipated number of instructional days: 180

Einstein Academy anticipates a final 2013-2014 academic calendar similar to the calendar shown below:

Holidays and Work Days	Dates
Work Days – No Students	August 12-16, 2013
First Day of School	August 19, 2013
Labor Day	September 2, 2013
Fall Break	September 3-6, 2013
Veterans Day	November 11, 2013
Work Day – No Students	November 27, 2013
Thanksgiving Break	November 28-29, 2013
Winter Break	December 23, 2013 – January 3, 2014
Martin Luther King, Jr. Day	January 20, 2014
Presidents' Day	February 18, 2014
Cesar Chavez Day	March 31, 2014
Work Day – No Students	April 14, 2014
Spring Break	April 15 - 25, 2014
Memorial Day	May 26, 2014
Last Day of School	June 12, 2014
Work Day – No Students	June 13, 2014

APPENDIX B. Core Curriculum Scope and Sequence

Grades K and 1 Overarching Theme: We Take Care of Each Other Everyone is Important Here

Texts and Resources	Reading Street Engage NY MATH Scott Foresman Science California History-Social Science Course Models, Harcourt Reflections, teacher-selected lessons		
Assessments	NWEA's Measures of Academic Progress(Sept., Nov.); publisher assessments in all core academic content areas; ongoing formative and summative assessments in all content areas.	NWEA's Measures of Academic Progress(Feb.); publisher assessments in all core academic content areas; ongoing formative and summative assessments in all content areas.	NWEA's Measures of Academic Progress(April); publisher assessments in all core academic content areas; ongoing formative and summative assessments in all content areas.

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Grades 2 and 3 Overarching Theme: What's the Difference?

	1st Trimester (Sept – Nov)	2nd Trimester (Dec – mid-March)	3rd Trimester (Mid-March – June)
Schoolwide Theme	A sustainable world	A just world	A humane world
Grade Level Thematic Guiding Questions	How is it important to adapt to one's environment? How people relate to their environments, how American Indians in the region lived; adaptations may improve an organism's chance of survival How can we see change over time? Family history, compare lifestyles of three generations, personal timeline; how maps can show change, what differences in places made ancestors move; different types of animals' life cycles change, individuals' characteristics vary within a population	How can change help us? How local history has evolved, why heroes took the risks they did; energy and matter can change forms, and this can help us How can we look at differences? Different land use in California, food production and consumption long ago and today; how heroes made a difference in other people 's lives; how objects' motion can change over time	How are governments supposed to protect people? The role of laws and the government; case study on how governments control human use of rock, water, plants and soil as sources of food, fuel and building materials Why might we care about cause and effect? How laws are used to control people's actions, how nations interact to solve problems; how rocks change over time, how humans use rocks, water, plants and soil
ENGLISH-LANG. ARTS	Within heterogeneous classes, students are grouped by instructional need to facilitate their progress at a faster rate than uniform groupings would. This means that they will proceed through the standards at different rates in a continually differentiated curriculum, at times evaluated with school-wide scoring rubrics.		

Reading Students read and understand appropriate material. They use a variety of comprehension strategies. They make progress toward Grade 4 expectation that students will read over ½ million words annually, including narrative and expository text Students read and respond to a wide variety of significant works of children's literature. They distinguish between the structural features of the text and the literary terms or elements (e.g., theme, plot, setting, characters).	Theme-based literature: Curry, Jane Louise. Back in the Beforetime: Tales of the California Indians. Roca, Niria. Los Desiertos. Simms, Laura. Bone Man, The: An Adaptation of a Modoc Folktale; Trafzer, Cliff, Smith-Trafzer, Lee. Creation of a California Tribe; Grandfather's Maidu Indian Tales; Yue, Charlotte and David. The Wigwam and the Longhouse. Bunting, Eve. Going Home; Bunting, Eve. How Many Days to America: A Thanksgiving Story; Climo, Shirley. The Korean Cinderella. Fox, Mem. Wilfrid Gordon McDonald Partridge; Hamilton, Virginia. The Bells of Christmas; Lobel, Arnold. Fables; Polacco, Patricia. Chicken Sunday; Turner, Anne. Dust for Dinner; Roland, Donna. Grandfather's Stories from Mexico. Smucker, Anna Egan . No Star Nights. Watson, Mary. The Butterfly Seeds; Wheatley, Nadia and Donna Rawlins. My Place; Yarborough, Camille. Cornrows. Grade 2 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.1 Recognize and use knowledge of spelling patterns (e.g., diphthongs, special vowel spellings) when reading. 1.2 Apply knowledge of basic syllabication rules when reading (e.g., vowel-consonant-vowel = su/per; vowel-consonant/consonant-vowel = sup/per). 1.3 Decode two-syllable nonsense words and regular multisyllable words. 2.0 Reading Comprehension 2.1 Use titles, tables of contents, and chapter headings to locate information in expository text. 2.2 State the purpose in reading (i.e., tell what information is sought).	Theme-based literature: Benjamin, Anne. Young Rosa Parks: Civil Rights Heroine; Benet, Rosemary, and Stephen Vincent Benet. A Book of Americans. Holt, 1987; Berenstain, Stan and Jan. Berenstain Bears and the Homework Hassle; Bray, Rosemary. Martin Luther King Jr; Burton, Virginia Lee. The Little House. Danziger, Paula. Amber Brown Wants Extra Credit; Johnston, Johanna. They Led the Way: 14 American Women; Lawrence, Jacob. Harriet and the Promised Land. Aladdin Books, 1997; Pinkney, Andrea Davis. Dear Benjamin Banneker; Tripp, Valerie. Josefina entra en accion: Un cuento de verano/Josefino Saves the Day: A Summer Story. Bennett, William J. The Children's Book of Heroes. Brenner, Barbara. Wagon Wheels. Maestro, Betsy. Coming to America. Marzollo, Jean. Happy Birthday, Martin Luther King. Lawrence, Jacob. Harriet and the Promised Land; Loomis, Christine. Across America, I Love You; Matthaei, Gay. Ledgerbook of Thomas Blue Eagle. Sweeney Joan, Me on the Map. Younger, Barbara. Purple Mountain Majesties. Grade 2 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development Theme-related 1.7 Understand and explain common antonyms and synonyms 2.0 Reading Comprehension 2.7 Interpret information from diagrams, charts, and graphs 3.0 Literary Response and Analysis 3.1 Compare and contrast plots, settings, and characters presented by different authors; 3.3 Compare and contrast different versions of the same stories that reflect different cultures; 1.0 Word Analysis, Fluency,	Theme-based literature **Benchley, Nathaniel.** George the Drummer Boy Guthrie, Woody. This Land is your Land. **Harrington, Janice.** Going North; Fritz, Jean. Will You Sign Here, John Hancock? Coward, 1976; Panzer, Nora (editor). Celebrate America: In Poetry and Art. **Schultz, Charles.** Here's to You, America! Barnes, Peter W., and Cheryl Shaw. Marshall, the Courthouse Mouse: A Tail of the Supreme Court Geisel, Theodore (Dr. Seuss) The Butter Battle Book. Grade 2 CCS: 2.0 Reading Comprehension Theme-related 2.6 Recognize cause-and-effect relationships in a text; 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.8 Use knowledge of individual words in unknown compound words to predict their meaning. 1.9 Know the meaning of simple prefixes and suffixes; 1.10 Identify simple multiple-meaning words. 2.0 Reading Comprehension 2.7 Interpret information from diagrams, charts, and graphs. 2.8 Follow two-step written instructions. 3.0 Literary Response and Analysis 3.4 Identify the use of rhythm, rhyme, and alliteration in poetry. Grade 3 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development Theme-related 1.6 Use sentence and word context to find the meaning of unknown words. 1.7 Use a dictionary to learn the meaning and other features of unknown words. 1.8 Use knowledge of prefixes (e.g., un-, re-, pre-, bi-, mis-, dis-) and suffixes(e.g., -er,` -est, -ful) to determine the meaning of words.

Writing Students write clear and coherent sentences and paragraphs that develop an idea. Their writing considers audience and purpose. Students progress through the stages of the writing process. Students describe and explain familiar objects, events, and experiences.	Both grades: 1.0 Writing Strategies 1.3 Understand the purposes of various reference materials (e.g., dictionary, thesaurus, atlas, encyclopedia). Grade 2 CCS: 2.0 Writing Applications 2.1 Write brief narratives based on their experiences. Grade 3 CCS: 2.0 Writing Applications 2.1 Write narratives with a context, well-chosen details and insight into why incident is memorable	Grade 2 CCS: 2.0 Writing Applications2.1 Write brief narratives based on their experiences. Grade 3 CCS: 2.0 Writing Applications 2.2 Write descriptions that use concrete sensory details to present and support unified impressions of people, places, things, or experiences.	Grade 2 CCS: 2.0 Writing Applications 2.2 Write a friendly letter complete with the date, salutation, body, closing, and signature. Grade 3 CCS: 2.0 Writing Applications2.3 Write personal and formal letters, thank-you notes, and invitations: a. Show awareness of the knowledge and interests of the audience and establish a purpose and context. b. Include the date, proper salutation, body, closing, and signature.
Student writing demonstrates a command of English and drafting, research, and organizational strategies	Grade 2 CCS: 1.0 Writing Strategies1.1 Group related ideas and maintain a consistent focus. 1.2 Create readable documents with legible handwriting. 1.4 Revise original drafts to improve sequence and provide more descriptive detail. Grade 3 CCS: 1.0 Writing Strategies 1.1 Create a single paragraph: a. Develop a topic sentence. b. Include simple supporting facts and details. 1.2 Write legibly in cursive or joined italic, allowing margins and correct spacing between letters in a word and words in a sentence. 1.4 Revise drafts to improve the coherence and logical progression of ideas by using an established rubric.		

Oral and Written English Language Conventions Students write and speak with a command of standard English conventions appropriate to this grade level.	Grade 2 CCS: 1.0 Written and Oral English Conventions 1.1 Distinguish between complete and incomplete sentences. 1.2 Recognize and use the correct word order in written sentences. Grade 3 CCS: 1.0 Written and Oral English Conventions 1.1 Understand and be able to use complete and correct declarative, interrogative, imperative, and exclamatory sentences in writing and speaking. 1.2 Identify subjects and verbs that are in agreement and identify and use pronouns, adjectives, compound words, and articles correctly in writing and speaking.	Grade 2 CCS: 1.0 Written and Oral English Conventions 1.3 Identify and correctly use various parts of speech, including nouns and verbs, in writing and speaking. 1.4 Use commas in the greeting and closure of a letter and with dates and items in a series. 1.5 Use quotation marks correctly. Grade 3 CCS: 1.0 Written and Oral English Conventions 1.3 Identify and use past, present, and future verb tenses properly in writing and speaking. 1.4 Identify and use subjects and verbs correctly in speaking and writing simple sentences. 1.5 Punctuate dates, city and state, and titles of books correctly. 1.6 Use commas in dates, locations, and addresses and for items in a series.	Grade 2 CCS: 1.0 Written and Oral English Conventions 1.6 Capitalize all proper nouns, words at the beginning of sentences and greetings, months and days of the week, and titles and initials of people. 1.7 Spell frequently used, irregular words correctly 1.8 Spell basic short-vowel, long-vowel, r-controlled, and consonant-blend patterns correctly. Grade 3 CCS: 1.0 Written and Oral English Conventions 1.7 Capitalize geographical names, holidays, historical periods, and special events correctly. 1.8 Spell correctly one-syllable words that have blends, contractions, compounds, ortho-graphic patterns (e.g., qu, consonant doubling, changing the ending of a word from -y to -ies when forming the plural), and common homophones (e.g., hair-hare). 1.9 Arrange words in alphabetic order.

Speaking/ Listening Students listen critically and respond appropriately to oral communication. They indicate important ideas with phrasing, pitch, and modulation. Presentations about familiar experiences or interests are organized around a thesis and demonstrate a command of English and organizational and delivery strategies	Grade 2 CCS: 1.0 Listening and Speaking Strategies 1.1 Determine the purpose or purposes of listening (e.g., to obtain information, to solve problems, for enjoyment). 1.2 Ask for clarification and explanation of stories and ideas. 1.3 Paraphrase information that has been shared orally by others. Grade 3 CCS: 1.0 Listening and Speaking Strategies1.1 Retell, paraphrase, and explain what has been said by a speaker. 1.2 Connect and relate prior experiences, insights, and ideas to those of a speaker. 1.3 Respond to questions with appropriate elaboration. 1.4 Identify the musical elements of literary language (e.g., rhymes, repeated sounds)	Grade 2 CCS: 1.0 Listening and Speaking Strategies 1.4 Give and follow three- and four-step oral directions. 1.5 Organize presentations to maintain a clear focus. 1.6 Speak clearly and at an appropriate pace for the type of communication (e.g., informal discussion, report to class). Grade 3 CCS: 1.0 Listening and Speaking Strategies1.5 Organize ideas chronologically or around major points of information. 1.6 Provide a beginning, a middle, and an end, including concrete details that develop a central idea. 1.7 Use clear and specific vocabulary to communicate ideas and establish the tone. 1.8 Clarify and enhance oral presentations through the use of appropriate props (e.g., objects, pictures, charts). 1.9 Read prose and poetry aloud with fluency, rhythm, and pace, using appropriate intonation and vocal patterns to emphasize important passages of the text being read. 1.10 Compare ideas and points of view expressed in broadcast and print media. 1.11 Distinguish between the speaker's opinions and verifiable facts.	Grade 2 CCS: 1.0 Listening and Speaking Strategies 1.7 Recount experiences in a logical sequence. 1.8 Retell stories, including characters, setting, and plot. 1.9 Report on a topic with supportive facts and details. 2.0 Speaking Applications 2.1 Recount experiences or present stories: a. Move through a logical sequence of events. b. Describe story elements (e.g., characters, plot, setting). 2.2 Report on a topic with facts and details, drawing from several sources of information. Grade 3 CCS: 1.0 Listening and Speaking Strategies 2.1 Make brief narrative presentations: a. Provide a context for an incident that is the subject of the presentation. b. Provide insight into why the selected incident is memorable. c. Include well-chosen details to develop character, setting, and plot. 2.2 Plan and present dramatic interpretations of experiences, stories, poems, or plays with clear diction, pitch, tempo, and tone. 2.3 Make descriptive presentations that use concrete sensory details to set forth and support unified impressions of people, places, things, or experiences.
HISTORY-SOCIAL SCIENCE: Historical and	Grade 2: People Who Make a Difference Grade 3: Continuity and Change		

Social Sciences Analysis Skills: Chronological and Spatial Thinking Research, Evidence, and Point of View Historical Interpretation	2.1Students differentiate between things that happened long ago and things that happened yesterday. 2.1.1Trace the history of a family through the use of primary and secondary sources, including artifacts, photographs, interviews, and documents. 2.1.2Compare and contrast their daily lives with those of their parents, grandparents, and/or guardians. 2.1.3Place important events in their lives in the order in which they occurred (e.g., on a time line or storyboard). 2.2 Students demonstrate map skills by describing the absolute and relative locations of people, places, and environments. 2.2.1Locate on a simple letter-number grid system the specific locations and geographic features in their neighborhood or community (e.g., map of the classroom, the school). 2.2.2Label from memory a simple map of the North American continent, including the countries, oceans, Great Lakes, major rivers, and mountain ranges. Identify the essential map elements: title, legend, directional indicator, scale, and date. 2.2.3Locate on a map where their ancestors live(d), telling when the family moved to the local community and how and why they made the trip. 2.2.4Compare and contrast basic land use in urban, suburban, and rural environments in California. 3.1 Students describe the physical and human geography and use maps, tables, graphs, photographs, and charts to organize information about people, places, and environments in a spatial context.	2.4 Students understand basic economic concepts and their individual roles in the economy and demonstrate basic economic reasoning skills. 2.4.1Describe food production and consumption long ago and today, including the roles of farmers, processors, distributors, weather, and land and water resources. 2.4.2Understand the role and interdependence of buyers (consumers) and sellers (producers) of goods and services. 2.4.3Understand how limits on resources affect production and consumption (what to produce and what to consume). 2.5 Students understand the importance of individual action and character and explain how heroes from long ago and the recent past have made a difference in others' lives (e.g., from biographies…). 3.3 Students draw from historical and community resources to organize the sequence of local historical events and describe how each period of settlement left its mark on the land. 3.3.1Research the explorers who visited here, the newcomers who settled here, and the people who continue to come to the region, including their cultural and religious traditions and contributions. 3.3.2Describe the economies established by settlers and their influence on the present-day economy, with emphasis on the importance of private property and entrepreneurship. 3.3.3Trace why their community was established, how individuals and families contributed to its founding	2.3 Students explain governmental institutions and practices in the United States and other countries. 2.3.1Explain how the United States and other countries make laws, carry out laws, determine whether laws have been violated, and punish wrongdoers. 2.3.2 Describe the ways in which groups and nations interact with one another to try to resolve problems in such areas as trade, cultural contacts, treaties, diplomacy, and military force. 3.4 Students understand the role of rules and laws in our daily lives and the basic structure of the U.S. government (except 3.4.4). 3.4.1Determine the reasons for rules, laws, and the U.S. Constitution; the role of citizenship in the promotion of rules and laws; and the consequences for people who violate rules and laws. 3.4.2Discuss the importance of public virtue and the role of citizens, including how to participate in a classroom, in the community, and in civic life. 3.4.3Know the histories of important local and national landmarks, symbols, and essential documents that create a sense of community among citizens and exemplify cherished ideals (e.g., the U.S. flag, the bald eagle, the Statue of Liberty, the U.S. Constitution, the Declaration of Independence, the U.S. Capitol). 3.4.5Describe the ways in which California, the other states, and sovereign American Indian tribes contribute to the making of our nation and participate in the federal system of government.

<table>
<tr><td>SCIENCE</td><td>Grade 2 Life Sciences: 2. Plants and animals have predictable life cycles.

Grade 3 Life Sciences: 3. Adaptations in physical structure or behavior may improve an organism's chance for survival.</td><td>Grade 2 Physical Sciences: 1. The motion of objects can be observed and measured.

Grade 3 Physical Sciences: 1. Energy and matter have multiple forms and can be changed from one form to another.</td><td>Grade 2 Earth Sciences: 3. Earth is made of materials that have distinct properties and provide resources for human activities.

Grade 3 Physical Sciences: 2. Light has a source and travels in a direction.
Grade 3 Earth Sciences: 4. Objects in the sky move in regular and predictable patterns.</td></tr>
<tr><td></td><td colspan="2">Investigation and Experimentation: Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:

Grade 2:
a. Make predictions based on observed patterns and not random guessing.
b. Measure length, weight, temperature, and liquid volume with appropriate tools and express those measurements in standard metric system units.
c. Compare and sort common objects according to two or more physical attributes (e.g., color, shape, texture, size, weight).
d. Write or draw descriptions of a sequence of steps, events, and observations.
e. Construct bar graphs to record data, using appropriately labeled axes.
f. Use magnifiers or microscopes to observe and draw descriptions of small objects or small features of objects.
g. Follow oral instructions for a scientific investigation.

Grade 3:
a. Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.
b. Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.
c. Use numerical data in describing and comparing objects, events, and measurements.
d. Predict the outcome of a simple investigation and compare the result with the prediction.
e. Collect data in an investigation and analyze those data to develop a logical conclusion.</td></tr>
<tr><td>MATH</td><td colspan="2">Students are grouped by instructional need to facilitate their progress at a fastest rate that uniform groupings would. Students progress sequentially through the California's Common Core State Standards from Grade 2 to Grade 3, in a curriculum that follows the order of the textbook.</td></tr>
</table>

Texts and Resources	Reading Street Engage NY MATH Scott Foresman Science California History-Social Science Course Models, Harcourt Reflections, teacher-selected lessons		
Assessments	NWEA's Measures of Academic Progress; publisher assessments in all core academic content areas; ongoing formative and summative assessments in all content areas	NWEA's Measures of Academic Progress; publisher assessments in all core academic content areas; ongoing formative and summative assessments in all content areas	NWEA's Measures of Academic Progress; publisher assessments in all core academic content areas; ongoing formative and summative assessments in all content areas

Deleted: enVision

Grades 4, 5 and 6
Overarching Themes:
Making Systems That Work
What Makes Things Change?

	1st Trimester (Sept – Nov)	2nd Trimester (Dec – mid-March)	3rd Trimester (mid-March – June)
Schoolwide Theme	A sustainable world	A just world	A humane world

Thematic Guiding Questions	How do we survive in our environment? Physical and human geography of California and early social, cultural, political and economic life (pre-Columbian, Spanish mission, Mexican rancho); Food chains: the role of plants, producers v. consumers, decomposers, ecosystems, what can survive in an environment, how plants and animals depend on each other, microorganisms, organisms in ecosystems; trade How do systems work? Native American settlements, what motivated explorers, why Native Americans and settlers had conflict, colonials systems: religious, social and economic; religion and the social and political order How have resources mattered to sustainability, then and now? Early human civilization; evidence of changes over time; resources- energy and materials	What made this place the way it is? Social, cultural, political and economic life in California (pre-Columbian, Spanish mission and Mexican rancho, and from the Bear Flag Republic to Mexican American War, the Gold Rush and the granting of statehood; California's transformation to an agricultural and industrial power; political and cultural development since the 1850s; Slow and rapid processes that change the earth, processes that break down rocks, how water changes the land; rivers and early civilizations; China What's the effect of that force? The causes, course and consequences of the American Revolution, plate tectonics	How does energy transform to make things work? California's transformation to an agricultural and industrial power; political and cultural development since the 1850s; How the Constitution directs political "energy" or power through the structures, functions and powers of local, state and federal governments; Simple series and parallel circuits, building a compass, how electromagnets work, how electrical energy transforms into heat, light and motion; heat really gets around But why do those properties matter to me? The Constitution and why it matters; what made people move around America from 1789 to the mid-1800s; students relate science concepts to their lives; properties of metals, how properties of substances are used to separate mixtures and identify compounds, properties of solids, liquids and gases, properties of salts
ENGLISH-LANG. ARTS	Within heterogeneous classes, students are grouped by instructional need to facilitate their progress at a faster rate than uniform groupings would. This means that they will proceed through the standards at different rates in a continually differentiated curriculum, at times evaluated with school-wide scoring rubrics.		

Reading Students read and understand appropriate material. They use a variety of comprehension strategies. They make progress toward Grade 4 expectation that students will read over ½ million words annually, including narrative and expository text Students read and respond to a wide variety of significant works of children's literature. They distinguish between the structural features of the text and the literary terms or elements (e.g., theme, plot, setting, characters).	Theme-based literature Grade 4 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.2 Apply knowledge of word origins, derivations, synonyms, antonyms, and idioms to determine the meaning of words and phrases. 1.3 Use knowledge of root words to determine the meaning of unknown words within a passage. 1.4 Know common roots and affixes derived from Greek and Latin and use this knowledge to analyze the meaning of complex words (e.g., international). 1.5 Use a thesaurus to determine related words and concepts. 3.0 Reading Response and Analysis 3.1 Describe the structural differences of various imaginative forms of literature, including fantasies, fables, myths, legends, and fairy tales. 3.5 Define figurative language (e.g., simile, metaphor, hyperbole, personification) and identify its use in literary works. Grade 5 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.2 Use word origins to determine the meaning of unknown words. 1.3 Understand and explain frequently used synonyms, antonyms, and homographs. 1.4 Know abstract, derived roots and affixes from Greek and Latin and use this knowledge to analyze the meaning of complex words (e.g., controversial). 1.5 Understand and explain the figurative and metaphorical use of words in context. 3.0 Reading Response and Analysis 3.5 Describe the function and effect of common literary devices (e.g., imagery,	Theme-based literature Theme-related Grade 4 CCS: 3.2 Identify the main events of the plot, their causes, and the influence of each event on future actions. 3.3 Use knowledge of the situation and setting and of a character's traits and motivations to determine the causes for that character's actions. Theme-related Grade 5 CCS: 3.0 Reading Response and Analysis 3.2 Identify the main problem or conflict of the plot and explain how it is resolved. 3.3 Contrast the actions, motives (e.g., loyalty, selfishness, conscientiousness), and appearances of characters in a work of fiction and discuss the importance of the contrasts to the plot or theme. Grade 4 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.6 Distinguish and interpret words with multiple meanings. 3.0 Reading Response and Analysis 3.4 Compare and contrast tales from different cultures by tracing the exploits of one character type and develop theories to account for similar tales in diverse cultures (e.g., trickster tales). Grade 6 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.3 Recognize the origins and meanings of frequently used foreign words in English and use these words accurately in speaking and writing. 2.0 Reading Comprehension 2.3 Connect and clarify main ideas by identifying their relationships to other sources and related topics. 2.4 Clarify an understanding of texts by creating outlines, logical notes, summaries, or	Theme-based literature Grade 4 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 2.0 Reading Comprehension 2.1 Identify structural patterns found in informational text (e.g., compare and contrast, cause and effect, sequential or chronological order, proposition and support) to strengthen comprehension. 2.4 Evaluate new information and hypotheses by testing them against known information and ideas. 2.5 Compare and contrast information on the same topic after reading several passages or articles. 2.6 Distinguish between cause and effect and between fact and opinion in expository text. 2.7 Follow multiple-step instructions in a basic technical manual (e.g., how to use computer commands or video games). Grade 5 CCS: 3.0 Reading Response and Analysis 3.1 Identify and analyze the characteristics of poetry, drama, fiction, explain the appropriateness of the literary forms chosen by an author for a specific purpose. 3.4 Understand that theme refers to the meaning or moral of a selection and recognize themes (whether implied or stated directly) in sample works. Grade 6 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development 1.4 Monitor expository text for unknown words or words with novel meanings by using word, sentence, and paragraph clues to determine meaning. 1.5 Understand and explain "shades of meaning" in related words (e.g., softly and quietly 2.0 Reading Comprehension 2.6 Determine the adequacy and appropriateness of the evidence for an author's conclusions.

	Grade 4, 5 and 6 CCS: 1.0 Word Analysis, Fluency, and Systematic Vocabulary Development1.1 Read narrative and expository text aloud with grade-appropriate fluency and accuracy and with appropriate pacing, intonation, and expression. Grade 4 CCS: 2.0 Reading Comprehension2.2 Use appropriate strategies when reading for different purposes (e.g., full comprehension, location of information, personal enjoyment). 2.3 Make and confirm predictions about text by using prior knowledge and ideas presented in the text itself, including illustrations, titles, topic sentences, important words, and foreshadowing clues.

Writing Students write clear and coherent sentences and paragraphs that develop an idea. Their writing considers audience and purpose. Students progress through the stages of the writing process. Students describe and explain familiar objects, events, and experiences. Student writing demonstrates a command of English and drafting, research, and organizational strategies	Grade 4 CCS: 1.0 Writing Strategies 1.7 Use various reference materials (e.g., dictionary, thesaurus, card catalog, encyclopedia, online information) as an aid to writing. 2.0 Writing Applications 2.1 Write narratives: a. Relate ideas, observations, or recollections of an event or experience. b. Provide a context to enable the reader to imagine the world of the event or experience. c. Use concrete sensory details. d. Provide insight into why the selected event or experience is memorable. Grade 5 CCS: 1.0 Writing Strategies 1.5 Use a thesaurus to identify alternative word choices and meanings. Grade 6 CCS: Writing Strategies (below) 2.0 Writing Applications 2.1 Write narratives 2.4 Write responses to literature	Grade 4 CCS: 1.0 Writing Strategies 1.3 Use traditional structures for conveying information (e.g., chronological order, cause and effect, similarity and difference, posing and answering a question). 2.0 Writing Applications 2.2 Write responses to literature: a. Demonstrate an understanding of the literary work. b. Support judgments through references to both the text and prior knowledge. 2.4 Write summaries that contain the main ideas of the reading selection and the most significant details. Grade 5 CCS: 1.0 Writing Strategies 2.2 Write responses to literature: a. Demonstrate an understanding of a literary work. b. Support judgments through references to the text and to prior knowledge. c. Develop interpretations that exhibit careful reading and understanding. Grade 6 CCS: 2.0 Writing Applications 2.5 Write persuasive compositions	Grade 4 CCS: 1.0 Writing Strategies 1.5 Quote or paraphrase information sources, citing them appropriately. 1.6 Locate information in reference texts by using organizational features (e.g., prefaces, appendixes). 1.8 Understand the organization of almanacs, newspapers, and periodicals and how to use those print materials. 2.0 Writing Applications 2.3 Write information reports: a. Frame a central question about an issue or situation. b. Include facts and details for focus. c. Draw from more than one source of information (e.g., speakers, books, newspapers, other media sources). Grade 5 CCS: 1.0 Writing Strategies 1.2 Create multiple-paragraph expository compositions: a. Establish a topic, important ideas, or events in sequence or chronological order. b. Provide details and transitional expressions that link one paragraph to another in a clear line of thought. c. Offer a concluding paragraph that summarizes important ideas and details. 1.3 Use organizational features of printed text (e.g., citations, end notes, bibliographic references) to locate relevant information. 1.4 Create simple documents by using electronic media and employing organizational features (e.g., passwords, entry and pull-down menus, word searches, a thesaurus, spell checks). 2.0 Writing Applications 2.3 Write research reports about important ideas, issues, or events by using the following guidelines: a. Frame questions that direct the investigation. b. Establish a controlling idea or topic. c. Develop the topic with simple facts, details, examples, and explanations.

	Grade 4 CCS: 1.0 Writing Strategies 1.1 Select a focus, an organizational structure, and a point of view based upon purpose, audience, length, and format requirements. 1.2 Create multiple-paragraph compositions: a. Provide an introductory paragraph. b. Establish and support a central idea with a topic sentence at or near the beginning of the first paragraph. c. Include supporting paragraphs with simple facts, details, and explanations. d. Conclude with a paragraph that summarizes the points. e. Use correct indention. 1.4 Write fluidly and legibly in cursive or joined italic. 1.9 Demonstrate basic keyboarding skills and familiarity with computer terminology (e.g., cursor, software, memory, disk drive, hard drive). 1.10 Edit and revise selected drafts to improve coherence and progression by adding, deleting, consolidating, and rearranging text. Grade 5 CCS: 1.1 Create multiple-paragraph narrative compositions: a. Establish and develop a situation or plot. b. Describe the setting. c. Present an ending. 1.6 Edit and revise manuscripts to improve the meaning and focus of writing by adding, deleting, consolidating, clarifying, and rearranging words and sentences. 2.0 Writing Applications2.1Write narratives: a. Establish a plot, point of view, setting, and conflict. b. Show, rather than tell, the events of the story. 2.4 Write persuasive letters or compositions: a. State a clear position in support of a proposal. b. Support a position with relevant evidence. c. Follow a simple organizational pattern. d. Address reader concerns. Grade 6 CCS: 1.0 Writing Strategies 1.1 Choose the form of writing (e.g., personal letter, letter to the editor, review, poem, report, narrative) that best suits the intended purpose. 1.2 Create multiple-paragraph expository compositions: a. Engage the interest of the reader and state a clear purpose. b. Develop the topic with supporting details and precise verbs, nouns, and adjectives to paint a visual image in the mind of the reader. c. Conclude with a detailed summary linked to the purpose of the composition. 1.6 Revise writing to improve the organization and consistency of ideas within and between paragraphs.

Written and Oral English Language Conventions Students write and speak with a command of standard English conventions appropriate to this grade level.	Grade 4 CCS: 1.0 Written and Oral English Language Conventions 1.4 Use parentheses, commas in direct quotations, and apostrophes in the possessive case of nouns and in contractions. 1.7 Spell correctly roots, inflections, suffixes and prefixes, and syllable constructions. Grade 5 CCS: 1.0 Written and Oral English Language Conventions 1.3 Use a colon to separate hours and minutes and to introduce a list; use quotation marks around the exact words of a speaker and titles of poems, songs, short stories, and so forth. 1.5 Spell roots, suffixes, prefixes, contractions, and syllable constructions correctly. Written and Oral English Language Conventions 1.4 Use correct capitalization. 1.5 Spell frequently misspelled words correctly (e.g., their, they're, there). Listening and Speaking Strategies	Grade 4 CCS: 1.0 Written and Oral English Language Conventions 1.1 Use simple and compound sentences in writing and speaking. 1.2 Combine short, related sentences with appositives, participial phrases, adjectives, ad-verbs, and prepositional phrases. 1.3 Identify and use regular and irregular verbs, adverbs, prepositions, and coordinating conjunctions in writing and speaking. Grade 5 CCS: 1.0 Written and Oral English Language Conventions 1.1 Identify and correctly use prepositional phrases, appositives, and independent and dependent clauses; use transitions and conjunctions to connect ideas. 1.2 Identify and correctly use verbs that are often misused (e.g., lie/lay, sit/set, rise/raise), modifiers, and pronouns. Written and Oral English Language Conventions 1.01 Use simple, compound, and compound-complex sentences; use effective coordination and subordination of ideas to express complete thoughts. 1.02 Identify and properly use indefinite pronouns and present perfect, past perfect, and future perfect verb tenses; ensure that verbs agree with compound subjects.	Grade 4 CCS: 1.0 Written and Oral English Language Conventions1.5 Use underlining, quotation marks, or italics to identify titles of documents. 1.6 Capitalize names of magazines, newspapers, works of art, musical compositions, organizations, and the first word in quotations when appropriate. Grade 5 CCS: 1.0 Written and Oral English Language Conventions 1.4 Use correct capitalization. Written and Oral English Language Conventions 1.3 Use colons after the salutation in business letters, semicolons to connect independent clauses, and commas when linking two clauses with a conjunction in compound sentences

Speaking/Listening Students listen critically and respond appropriately to oral communication. They indicate important ideas with phrasing, pitch, and modulation. Presentations about familiar experiences or interests are organized around a thesis and demonstrate a command of English and organizational and delivery strategies	Grade 4 CCS: 1.0 Listening and Speaking Strategies 1.1 Ask thoughtful questions and respond to relevant questions with appropriate elaboration in oral settings. 1.3 Identify how language usages (e.g., sayings, expressions) reflect regions and cultures. 2.0 Speaking Applications 2.3 Deliver oral summaries of articles and books that contain the main ideas of the event or article and the most significant details. 2.4 Recite brief poems (i.e., two or three stanzas), soliloquies, or dramatic dialogues, using clear diction, tempo, volume, and phrasing. Grade 5 CCS: 1.0 Listening and Speaking Strategies 1.1 Ask questions that seek information not already discussed. Grade 6 CCS: 1.0 Listening and Speaking Strategies 1.3 Restate and execute multiple-step oral instructions and directions	Grade 4 CCS: 1.0 Listening and Speaking Strategies 1.2 Summarize major ideas and supporting evidence presented in spoken messages and formal presentations. 1.5 Present effective introductions and conclusions that guide and inform the listener's understanding of important ideas and evidence. 1.6 Use traditional structures for conveying information (e.g., cause and effect, similarity and difference, posing and answering a question). 1.7 Emphasize points in ways that help the listener or viewer to follow important ideas and concepts. 1.8 Use details, examples, anecdotes, or experiences to explain or clarify information. Grade 5 CCS: 1.0 Listening and Speaking Strategies 1.2 Interpret a speaker's verbal and nonverbal messages, purposes, and perspectives. 1.3 Make inferences or draw conclusions based on an oral report. 1.5 Clarify and support spoken ideas with evidence and examples. 2.0 Speaking Applications 2.3 Deliver oral responses to literature: a. Summarize significant events and details. b. Articulate an understanding of several ideas or images communicated by the literary work. c. Use examples or textual evidence from the work to support conclusions. Grade 6 CCS: 1.0 Listening and Speaking Strategies 1.1 Relate the speaker's verbal communication (e.g., word choice, pitch, feeling, tone) to the nonverbal messag[illegible] (e.g., posture, gesture). 1.2 Identify the tone, mood, and emotion conveyed in the oral communication. 1.8 Analyze the use of	Grade 4 CCS: 1.0 Listening and Speaking Strategies 1.4 Give precise directions and instructions. 1.9 Use volume, pitch, phrasing, pace, modulation, and gestures appropriately to enhance meaning. 1.10 Evaluate the role of the media in focusing attention on events and in forming opinions on issues. 2.0 Speaking Applications 2.1 Make narrative presentations: a. Relate ideas, observations, or recollections about an event or experience. b. Provide a context that enables the listener to imagine the circumstances of the event or experience. c. Provide insight into why the selected event or experience is memorable. 2.2 Make informational presentations: a. Frame a key question. b. Include facts and details that help listeners to focus. c. Incorporate more than one source of information (e.g., speakers, books, newspapers, television or radio reports). Grade 5 CCS: 1.0 Listening and Speaking Strategies 1.4 Select a focus, organizational structure, and point of view for an oral presentation. 1.6 Engage the audience with appropriate verbal cues, facial expressions, and gestures. 1.7 Identify, analyze, and critique persuasive techniques (e.g., promises, dares, flattery, glittering generalities); identify logical fallacies used in oral presentations and media messages. 1.8 Analyze media as sources for information, entertainment, persuasion, interpretation of events, and transmission of culture. 2.0 Speaking Applications 2.1Deliver narrative presentations: a. Establish a situation, plot, point of view, and setting with descriptive words and phrases. b. Show, rather than tell, the listener

HISTORY-SOCIAL SCIENCE:	Grade 4: California: A Changing State Grade 5: United States History and Geography: Making a New Nation Grade 6: World History and Geography: Ancient Civilizations

Chronological and Spatial Thinking Research, Evidence, and Point of View Historical Interpretation	4.1 Students demonstrate an understanding of the physical and human geographic features that define places and regions in California. 4.1.1Explain and use the coordinate grid system of latitude and longitude to determine the absolute locations of places in California and on Earth. 4.1.2Distinguish between the North and South Poles; the equator and the prime meridian; the tropics; and the hemispheres, using coordinates to plot locations. 4.1.3Identify the state capital and describe the various regions of California, including how their characteristics and physical environments (e.g., water, landforms, vegetation, climate) affect human activity. 4.1.4Identify the locations of the Pacific Ocean, rivers, valleys, and mountain passes and explain their effects on the growth of towns. 4.1.5Use maps, charts, and pictures to describe how communities in California vary in land use, vegetation, wildlife, climate, population density, architecture, services, and transportation. 4.2.1 – 4.2.6 Students describe the social, political, cultural, and economic life and interactions among people of California from the pre-Columbian societies to the Spanish mission and Mexican rancho periods. 4.2.1Discuss the major nations of California Indians, including their geographic distribution, economic activities, legends, and religious beliefs, and describe how they depended on, adapted to, and modified the physical environment by cultivation of land and use of sea resources. 4.2.2Identify the early land and sea routes to, and European settlements in, California with a focus on the exploration of the North Pacific (e.g., by Captain James Cook, Vitus Bering, Juan Cabrillo), noting especially the importance of mountains, deserts, ocean currents, and wind patterns. 4.2.3Describe the Spanish exploration and colonization of California, including the relationships among soldiers, missionaries, and Indians (e.g., Juan Crespi, Junipero Serra, Gaspar de Portola). 4.2.4Describe the mapping of, geographic basis of, and economic factors in the placement and function of the Spanish missions; and understand how the mission system expanded the influence of Spain and Catholicism throughout New Spain and Latin America. 4.2.5Describe the daily lives of the people, native and nonnative, who occupied the presidios, missions, ranchos, and pueblos. 4.2.6Discuss the role of the Franciscans in changing the economy of California from a hunter-gatherer economy to an agricultural economy. 5.1 Students describe the major pre-Columbian settlements, including the cliff dwellers and pueblo people of the desert Southwest, the American Indians of the Pacific Northwest, the nomadic nations of the Great Plains, and the woodland peoples east of the Mississippi River. 5.5.1Describe how geography and climate influenced the way various nations lived and adjusted to the natural environment, including locations of villages, the distinct structures that they built, and how they obtained food, clothing, tools, and utensils. 5.1.2Describe their varied customs and folklore traditions.	4.2.7 Describe the effects of the Mexican War for Independence on Alta California, including its effects on the territorial boundaries of North America. 4.2.8Discuss the period of Mexican rule in California and its attributes, including land grants, secularization of the missions, and the rise of the rancho economy. 4.3 Students explain the economic, social, and political life in California from the establishment of the Bear Flag Republic through the Mexican-American War, the Gold Rush, and the granting of statehood. 4.3.1Identify the locations of Mexican settlements in California and those of other settlements, including Fort Ross and Sutter's Fort. 4.3.2Compare how and why people traveled to California and the routes they traveled (e.g., James Beckwourth, John Bidwell, John C. Fremont, Pio Pico). 4.3.3Analyze the effects of the Gold Rush on settlements, daily life, politics, and the physical environment (e.g., using biographies of John Sutter, Mariano Guadalupe Vallejo, Louise Clapp). 4.3.4Study the lives of women who helped build early California (e.g., Biddy Mason). 4.3.5Discuss how California became a state and how its new government differed from those during the Spanish and Mexican periods. 4.4.1 – 4.4.3 Students explain how California became an agricultural and industrial power, tracing the transformation of the California economy and its political and cultural development since the 1850s. 4.4.1Understand the story and lasting influence of the Pony Express, Overland Mail Service, Western Union, and the building of the transcontinental railroad, including the contributions of Chinese workers to its construction. 4.4.2Explain how the Gold Rush transformed the economy of California, including the types of products produced and consumed, changes in towns (e.g., Sacramento, San Francisco), and economic conflicts between diverse groups of people. 4.4.3Discuss immigration and migration to California between 1850 and 1900, including the diverse composition of those who came; the countries of origin and their relative locations; and conflicts and accords among the diverse groups (e.g., the 1882 Chinese Exclusion Act). 5.4.4Identify the significance and leaders of the First Great Awakening, which marked a shift in religious ideas, practices, and allegiances in the colonial period, the growth of religious toleration, and free exercise of religion. 5.4.5Understand how the British colonial period created the basis for the development of political self-government and a free-market economic system and the differences between the British, Spanish, and French colonial systems. 5.4.6Describe the introduction of slavery into America, the responses of slave families to their condition, the ongoing struggle between proponents and opponents of slavery, and the gradual institutionalization of slavery in the South. 5.4.7Explain the early democratic ideas and practices that emerged during the colonial period, including the significance of representative assemblies and town meetings. 166 5.5 Students explain the causes of the American Revolution. 5.5.1Understand how	4.4.4 Describe rapid American immigration, internal migration, settlement, and the growth of towns and cities (e.g., Los Angeles). 4.4.5Discuss the effects of the Great Depression, the Dust Bowl, and World War II on California. 4.4.6Describe the development and locations of new industries since the nineteenth century, such as the aerospace industry, electronics industry, large-scale commercial agriculture and irrigation projects, the oil and automobile industries, communications and defense industries, and important trade links with the Pacific Basin. 4.4.7Trace the evolution of California's water system into a network of dams, aqueducts, and reservoirs. 4.4.8Describe the history and development of California's public education system, including universities and community colleges. 4.4.9Analyze the impact of twentieth-century Californians on the nation's artistic and cultural development, including the rise of the entertainment industry (e.g., Louis B. Meyer, Walt Disney, John Steinbeck, Ansel Adams, Dorothea Lange, John Wayne). 4.5 Students understand the structures, functions, and powers of the local, state, and federal governments as described in the U.S. Constitution. 4.5.1Discuss what the U.S. Constitution is and why it is important (i.e., a written document that defines the structure and purpose of the U.S. government and describes the shared powers of federal, state, and local governments). 4.5.2Understand the purpose of the California Constitution, its key principles, and its relationship to the U.S. Constitution. 4.5.3Describe the similarities (e.g., written documents, rule of law, consent of the governed, three separate branches) and differences (e.g., scope of jurisdiction, limits on government powers, use of the military) among federal, state, and local governments. 4.5.4Explain the structures and functions of state governments, including the roles and responsibilities of their elected officials. 4.5.5Describe the components of California's governance structure (e.g., cities and towns, Indian rancherias and reservations, counties, school districts). 5.7 Students describe the people and events associated with the development of the U.S. Constitution and analyze the Constitution's significance as the foundation of the American republic. 5.7.1List the shortcomings of the Articles of Confederation as set forth by their critics. 5.7.2Explain the significance of the new Constitution of 1787, including the struggles over its ratification and the reasons for the addition of the Bill of Rights. 5.7.3Understand the fundamental principles of American constitutional democracy, including how the government derives its power from the people and the primacy of individual liberty. 5.7.4Understand how the Constitution is designed to secure our liberty by both empowering and limiting central government and compare the powers granted to citizens, Congress, the president, and the Supreme Court with those reserved to the states. 5.7.5Discuss the meaning of

SCIENCE	Grade 4 Life Sciences: 2. All organisms need energy and matter to live and grow. 3. Living organisms depend on one another and on their environment for survival. Grade 5 Life Sciences: 2. Plants and animals have structures for respiration, digestion, waste disposal, and transport of materials. Grade 5 Earth Sciences: 5. The solar system consists of planets and other bodies that orbit the Sun in predictable paths. Grade 6 Life Sciences: 5. Organisms in ecosystems exchange energy and nutrients 6. Sources of energy and materials differ Grade 6 Investigation and Experimentation: f. Read a topographic map and a geologic map for evidence provided on the maps and construct and interpret a simple scale map. g. Interpret events by sequence and time from natural phenomena (e.g., the relative ages of rocks and intrusions). h. Identify changes in natural phenomena over time without manipulating the phenomena (e.g., a tree limb, a grove of trees, a stream, and a hill slope).	Grade 4 Earth Sciences: 4. The properties of rocks and minerals reflect the processes that formed them. 5. Waves, wind, water, and ice shape and reshape Earth's land surface. Grade 5 Earth Sciences: 3. Water on Earth moves between the oceans and land through the processes of evaporation and condensation. 4. Energy from the Sun heats Earth unevenly, causing air movements that result in changing weather patterns. Grade 6 Earth Sciences: 1. Plate tectonics accounts for important features of Earth's surface and major geologic events. 2. Topography is reshaped by the weathering of rock and soil and by the transportation and deposition of sediment	Grade 4 Physical Sciences: 1. Electricity and magnetism are related effects that have many useful applications in everyday life. Grade 5 Physical Sciences: 1. Elements and their combinations account for all the varied types of matter in the world. Grade 6 Physical Sciences: 3. Heat moves in a predictable flow from warmer objects to cooler objects until all the objects are at the same temperature. 4. Many phenomena on Earth's surface are affected by the transfer of energy through radiation and convection currents.

	Investigation and Experimentation: Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will: Grade 4: a. Differentiate observation from inference (interpretation) and know scientists' explanations come partly from what they observe and partly from how they interpret their observations. b. Measure and estimate the weight, length, or volume of objects. c. Formulate and justify predictions based on cause-and-effect relationships. d. Conduct multiple trials to test a prediction and draw conclusions about the relationships between predictions and results. e. Construct and interpret graphs from measurements. f. Follow a set of written instructions for a scientific investigation. Grade 5: a. Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria. b. Develop a testable question. c. Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure. d. Identify the dependent and controlled variables in an investigation. e. Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment. f. Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations. g. Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data. h. Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion. i. Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions. Grade 6 7. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will: a. Develop a hypothesis. b. Select and use appropriate tools and technology including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data. c. Construct appropriate graphs from data and develop qualitative statements about the relationships between variables. d. Communicate the steps and results from an investigation in written reports and oral presentations. e. Recognize whether evidence is consistent with a proposed explanation.
MATH	Students are grouped by instructional need to facilitate their progress at a fastest rate that uniform groupings would. Students progress sequentially through the California's Common Core State Standards from Grade 4 through Grade 6, in a curriculum that follows the order of the textbook.

Texts and Resources	Reading Street eEngage NY MATH Scott Foresman Science California History-Social Science Course Models, Harcourt Reflections, teacher-selected lessons		
Assessments	NWEA's Measures of Academic Progress; publisher assessments in all core academic content areas; ongoing formative and summative assessments in all content areas	NWEA's Measures of Academic Progress; publisher assessments in all core academic content areas; ongoing formative and summative assessments in all content areas	NWEA's Measures of Academic Progress; publisher assessments in all core academic content areas; ongoing formative and summative assessments in all content areas

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Accelerated Learner Model--For those students who learn at a greatly accelerated pace in certain subjects area, they make take those classes independently, at their own pace, under the direction of an Einstein faculty member.

Flip Model--For those students who, due to a psycho-social or physical limitation and are unable to be in the classroom for the full day or perform better through limited home study, they make take certain classes independently, at their own pace, under the direction of an Einstein faculty member.

World Language Model--For those students who wish to take a World/Foreign Language offered at a different Einstein campus but not their home campus, they may pursue that language independently, under the direction of the appropriate Einstein faculty member.

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Instructional level	Text books and supplemental Instructional materials	Skills taught
Level 0 (Kindergarten Cluster)	Chinese Paradise I; Multimedia, Word and Pinyin cards; stories, children's songs, and teacher-created materials.	Initial Chinese to communicate in classroom; stories; song and dance; simple arts & crafts; symbols of Pinyin.
Level One (First Grade Cluster)	Chinese Paradise II; Multimedia, Word and Pinyin cards, stories, children's songs; reading, and teacher-created materials.	Longer and daily used words, song and dance, simple and easy poems with pictures for reading; Pinyin - spelling; writing; remembering.
Level Two (Second Grade Cluster)	Chinese Paradise III; Multimedia, Word and Pinyin cards, more rhymes, tongue twisters, short poems; and teacher-created materials.	Conversations in stores; talking about food, vacations, gift, schools, holidays; conversation to make appointments, invite guests and host a party; basic grammar; initial writing in Chinese word processor / online.
Level Three (Third Grade Cluster)	Learn Chinese with Me I; online and multimedia, and teacher-created materials.	Sound discrimination and tone; phrases, sentences patterns; more complex counting units; appellations; conjunctions, build vocabularies; grammar and articles; improved writing in Chinese word processor / online.

Level Four (Fourth Grade Cluster)	Learn Chinese with Me II; dictionary; stories; online and multimedia; and teacher-created materials.	How to use dictionary; sentence patterns; stroke orders; more complex grammar; low-intermediate writing in Chinese word processor / online.
Level Five (Fifth Grade Cluster)	Learn Chinese with Me III; dictionary; stories; online and multimedia; and teacher-created materials.	Pinyin, Chinese characters, character components vocabulary and sentence patterns; grammar; low-intermediate writing in Chinese word processor / online.
Level Six (Sixth Grade Cluster)	Learn Chinese with Me IV; dictionary; stories; online and multimedia; and teacher-created materials.	Pinyin, Chinese characters, character components vocabulary and sentence patterns; polyphones; intermediate writing in Chinese word processor / online.

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Social-Emotional Development (15 min.)

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Social-Emotional Development (15 min.)

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Language Arts (65 min. on 2 days), includes 30 min. ELD/EL/Struggling Reader Support
Mandarin (50 min. on 3 days)

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AEALAS Foundation

The AEALAS Foundation is a separately incorporated non-profit entity that is organized under the Internal Revenue Code section 509(a)(3) supporting organization. Its purpose is to contribute to, support, operate in connection with and enhance the tax-exempt programs and missions of AEALAS.

Mathematics Curriculum

A Story of Ratios: A Curriculum Overview for Grades 6-8

Table of Contents

Introduction

This document provides an overview of the academic year for Grades 6 through 8, beginning with a curriculum map and followed by detailed grade level descriptions.

The curriculum map is a chart that shows, at a glance, the sequence of modules comprising each grade of the Grades 6 through 8 curriculums. The map also indicates the approximate number of instructional days designated for each module of each grade. The date approximations are based on an academic calendar beginning on 9/6/12 and ending on 6/26/13 with a testing date approximately mid-late April. Details that elaborate on the curriculum map are found in the grade-level descriptions.

Each grade-level description begins with a list of the five to seven modules that comprise the instruction of that grade. That introductory component is followed by three sections: the Summary of Year, the Rationale for Module Sequence, and the alignment chart with the grade-level standards.

The "Summary of Year" portion of each grade level includes four pieces of information:

- The critical instructional areas for the grade, as described in the Common Core Learning Standards[1] (CCLS)
- The Key Areas of Focus[2] for the grade
- The Required Fluencies for the grade
- The CCLS Major Emphasis Clusters[3] for the grade

The "Rationale for Module Sequence" portion of each grade level provides a brief description of the instructional focus of each module for that grade and explains the developmental sequence of the mathematics.

The alignment chart for each grade lists the CCLS that are addressed in each module of the grade. Note that when a cluster is referred to without a footnote, it is taught in its entirety. There are also times when footnotes are relevant to particular standards within a cluster. All standards for each grade have been carefully included in the module sequence. Some standards are deliberately included in more than one module, so that a strong foundation can be built over time. Note that the standards identified on the Pre-Post Standards[4] document as those which should be taught after the state test in April, have been intentionally aligned with the final modules of those grades.

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[1] EngageNY: http://www.p12.nysed.gov/ciai/common_core_standards/pdfdocs/nysp12cclsmath.pdf
[2] Achievethecore: http://www.achievethecore.org/downloads/E0702_Description_of_the_Common_Core_Shifts.pdf
[3] EngageNY: http://engageny.org/sites/default/files/resource/attachments/nys-math-emphases-k-hs.pdf
[4] NYSED: http://www.p12.nysed.gov/assessment/ei/2013/draft-math-ccls-13.pdf

	Grade 6	Grade 7	Grade 8	
20 days	M1: Ratios and Unit Rates (35 days)	M1: Ratios and Proportional Relationships (30 days)	M1: Integer Exponents and the Scientific Notation (20 days)	20 days
20 days			M2: The Concept of Congruence (25 days)	20 days
20 days	M2: Arithmetic Operations Including Dividing by a Fraction (25 days)	M2: Rational Numbers (30 days)		20 days
20 days	M3: Rational Numbers (25 days)	M3: Expressions and Equations (35 days)	M3: Similarity (25 days)	20 days
20 days	M4: Expressions and Equations (45 days)		M4: Linear Equations (40 days)	20 days
20 days		M4: Percent and Proportional Relationships (25 days)		20 days
20 days		M5: Statistics and Probability (25 days)	M5: Examples of Functions from Geometry (15 days)	20 days
20 days	M5: Area, Surface Area, and Volume Problems (25 days)		M6: Linear Functions (20 days)	20 days
20 days	M6: Statistics (25 days)	M6: Geometry (35 days)	M7: Introduction to Irrational Numbers Using Geometry (35 days)	20 days

Approx. test date for Grades 6-8

Key:	Number	Geometry	Ratios and Proportions	Expressions and Equations	Statistics and Probability	Functions

Sequence of Grade 6 Modules Aligned with the Standards

Module 1: Ratios and Unit Rates
Module 2: Arithmetic Operations Including Dividing by a Fraction
Module 3: Rational Numbers
Module 4: Expressions and Equations
Module 5: Area, Surface Area, and Volume Problems
Module 6: Statistics

Summary of Year

Sixth grade mathematics is about (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking.

Key Areas of Focus for Grade 6: Ratios and proportional reasoning; early expressions and equations

Required Fluency:

6.NS.2	Multi-digit division
6.NS.3	Multi-digit decimal operations

CCLS Major Emphasis Clusters
Ratios and Proportional Relationships • Understand ratio concepts and use ratio reasoning to solve problems.
The Number System • Apply and extend previous understandings of multiplication and division to divide fractions by fractions. • Apply and extend previous understandings of numbers to the system of rational numbers.
Expressions and Equations • Apply and extend previous understandings of arithmetic to algebraic expressions. • Reason about and solve one-variable equations and inequalities. • Represent and analyze quantitative relationships between dependent and independent variables.

Rationale for Module Sequence in Grade 6

In Module 1, students build on their prior work in measurement and in multiplication and division as they study the concepts and language of ratios and unit rates. They use proportional reasoning to solve problems. In particular, students solve ratio and rate using tape diagrams, tables of equivalent ratios, double number line diagrams, and equations. They plot pairs of values generated from a ratio or rate on the first quadrant of the coordinate plane.

Students expand their understanding of the number system and build their fluency in arithmetic operations in Module 2. Students learned in Grade 5 to divide whole numbers by unit fractions and unit fractions by whole numbers. Now, they apply and extend their understanding of multiplication and division to divide fractions by fractions. The meaning of this operation is connected to real-world problems as students are asked to create and solve fraction division word problems. Students continue (from Fifth Grade) to build fluency with adding, subtracting, multiplying, and dividing multi-digit decimal numbers using the standard algorithms.

Major themes of Module 3 are to understand rational numbers as points on the number line and to extend previous understandings of numbers to the system of rational numbers, which now include negative numbers. Students extend coordinate axes to represent points in the plane with negative number coordinates and, as part of doing so, see that negative numbers can represent quantities in real-world contexts. They use the number line to order numbers and to understand the absolute value of a number. They begin to solve real-world and mathematical problems by graphing points in all four quadrants, a concept that continues throughout to be used into high school and beyond.

With their sense of number expanded to include negative numbers, in Module 4 students begin formal study of algebraic expressions and equations. Students learn equivalent expressions by continuously relating algebraic expressions back to arithmetic and the properties of arithmetic (commutative, associative, and distributive). They write, interpret, and use expressions and equations as they reason about and solve one-variable equations and inequalities and analyze quantitative relationships between two variables.

Module 5 is an opportunity to practice the material learned in Module 4 in the context of geometry; students apply their newly acquired capabilities with expressions and equations to solve for unknowns in area, surface area, and volume problems. They find the area of triangles and other two-dimensional figures and use the formulas to find the volumes of right rectangular prisms with fractional edge lengths. Students use negative numbers in coordinates as they draw lines and polygons in the coordinate plane. They also find the lengths of sides of figures, joining points with the same first coordinate or the same second coordinate and apply these techniques to solve real-world and mathematical problems.

In Module 6, students develop an understanding of statistical variability and apply that understanding as they summarize, describe, and display distributions. In particular, careful attention is given to measures of center and variability.

Alignment Chart

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 6 Modules[5]
Module 1: **Ratios and Unit Rates** (35 days)	**Understand ratio concepts and use ratio reasoning to solve problems.** **6.RP.1** Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. *For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."* **6.RP.2** Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. *For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is 3/4 cup of flour for each cup of sugar." "We paid $75 for 15 hamburgers, which is a rate of $5 per hamburger."*[6] **6.RP.3** Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. b. Solve unit rate problems including those involving unit pricing and constant speed. *For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?* c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent. d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

[5] When a cluster is referred to in this chart without a footnote, the cluster is taught in its entirety.
[6] Expectations for unit rates in this grade are limited to non-complex fractions.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 6 Modules[5]
Module 2: **Arithmetic Operations Including Dividing by a Fraction** (25 days)	**Apply and extend previous understandings of multiplication and division to divide fractions by fractions.** **6.NS.1** Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, create a story context for (2/3) ÷ (3/4) and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that (2/3) ÷ (3/4) = 8/9 because 3/4 of 8/9 is 2/3. (In general, (a/b) ÷ (c/d) = ad/bc.) How much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 3/4-cup servings are in 2/3 of a cup of yogurt? How wide is a rectangular strip of land with length 3/4 mi and area 1/2 square mi?* **Compute fluently with multi-digit numbers and find common factors and multiples.** **6.NS.2** Fluently divide multi-digit numbers using the standard algorithm.[7] **6.NS.3** Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.[8] **6.NS.4** Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. *For example, express 36 + 8 as 4 (9 + 2).*
Module 3: **Rational Numbers** (25 days)	**Apply and extend previous understandings of numbers to the system of rational numbers.** **6.NS.5** Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. **6.NS.6** Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane

[7] This fluency standard begins in this module and is practiced throughout the remainder of the year.
[8] This fluency standard begins in this module and is practiced throughout the remainder of the year.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 6 Modules[5]
	with negative number coordinates. a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., –(–3) = 3, and that 0 is its own opposite. b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. **6.NS.7** Understand ordering and absolute value of rational numbers. a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. *For example, interpret –3 > –7 as a statement that –3 is located to the right of –7 on a number line oriented from left to right.* b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. *For example, write –3°C > –7°C to express the fact that –3°C is warmer than -7°C.* c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. *For example, for an account balance of –30 dollars, write |–30| = 30 to describe the size of the debt in dollars.* d. Distinguish comparisons of absolute value from statements about order. *For example, recognize that an account balance less than –30 dollars represents a debt greater than 30 dollars.* **6.NS.8** Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 6 Modules[5]
Module 4: **Expressions and Equations** (45 days)	**Apply and extend previous understandings of arithmetic to algebraic expressions.**[9] **6.EE.1** Write and evaluate numerical expressions involving whole-number exponents. **6.EE.2** Write, read, and evaluate expressions in which letters stand for numbers. a. Write expressions that record operations with numbers and with letters standing for numbers. *For example, express the calculation "Subtract y from 5" as 5 – y.* b. Identify parts of an expression using mathematical terms (sum, term, product, factor quotient, coefficient); view one or more parts of an expression as a single entity. *For example, describe the expression 2 (8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.* c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). *For example, use the formulas $V = s^3$ and $A = 6 s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.* **6.EE.3** Apply the properties of operations to generate equivalent expressions. *For example, apply the distributive property to the expression 3 (2 + x) to produce the equivalent expression 6 + 3x; apply the distributive property to the expression 24x + 18y to produce the equivalent expression 6 (4x + 3y); apply properties of operations to y + y + y to produce the equivalent expression 3y.* **6.EE.4** Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). *For example, the expressions y + y + y and 3y are equivalent because they name the same number regardless of which number y stands for.*

[9] 6.EE.2c is also taught in Module 4 in the context of geometry.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 6 Modules[5]
	Reason about and solve one-variable equations and inequalities.[10] **6.EE.5** Understand solving an equation or inequality as a process of answering a question: Which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. **6.EE.6** Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. **6.EE.7** Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all nonnegative rational numbers. **6.EE.8** Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams. **Represent and analyze quantitative relationships between dependent and independent variables.** **6.EE.9** Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.*
Module 5: **Area, Surface Area, and Volume Problems** (25 days)	**Apply and extend previous understandings of arithmetic to algebraic expressions.**[11] **6.EE.2** Write, read, and evaluate expressions in which letters stand for numbers. c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those

[10] Except for 6.EE.8, this cluster is also taught in Module 4 in the context of geometry.
[11] This standard, taught in Module 4, is practiced in this module in the context of geometry.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 6 Modules[5]
	involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). *For example, use the formulas $V = s^3$ and $A = 6 s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.*
	Reason about and solve one-variable equations and inequalities.[12]
	6.EE.5 Understand solving an equation or inequality as a process of answering a question: Which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
	6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
	6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q, and x are all nonnegative rational numbers.
	Solve real-world and mathematical problems involving area, surface area, and volume.
	6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
	6.G.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = l\ w\ h$ and $V = b\ h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
	6.G.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.

[12] These standards, taught in Module 4, are practiced in this module in the context of geometry.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 6 Modules[5]
	6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.
Module 6: **Statistics** (25 days)	**Develop understanding of statistical variability.** 6.SP.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.* 6.SP.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. 6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. **Summarize and describe distributions.** 6.SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots. 6.SP.5 Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

Sequence of Grade 7 Modules Aligned with the Standards

Module 1: Ratios and Proportional Relationships
Module 2: Rational Numbers
Module 3: Expressions and Equations
Module 4: Percent and Proportional Relationships
Module 5: Statistics and Probability
Module 6: Geometry

Summary of Year

Seventh grade mathematics is about (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

Key Areas of Focus for Grade 7: Ratios and proportional reasoning; arithmetic of rational numbers

CCLS Major Emphasis Clusters
Ratios and Proportional Relationships • Analyze proportional relationships and use them to solve real-world and mathematical problems.
The Number System • Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
Expressions and Equations • Use properties of operations to generate equivalent expressions. • Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Rationale for Module Sequence in Grade 7

In Module 1, students build on their Grade 6 experiences with ratios, unit rates, and fraction division to analyze proportional relationships. They decide whether two quantities are in a proportional relationship, identify constants of proportionality, and represent the relationship by equations. These skills are then applied to real-world problems including scale drawings.

Students continue to build an understanding of the number line in Module 2 from their work in Grade 6. They learn to add, subtract, multiply, and divide rational numbers. Module 2 includes rational numbers as they appear in expressions and equations—work that is continued in Module 3.

Module 3 consolidates and expands students' previous work with generating equivalent expressions and solving equations. Students solve real-life and mathematical problems using numerical and algebraic expressions and equations. Their work with expressions and equations is applied to finding unknown angles and problems involving area, volume, and surface area.

Module 4 parallels Module 1's coverage of ratio and proportion, but this time with a concentration on percent. Problems in this module include simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, and percent error. Additionally, this module includes percent problems about populations, which prepare students for probability models about populations covered in the next module.

In Module 5, students learn to draw inferences about populations based on random samples. Through the study of chance processes, students learn to develop, use and evaluate probability models.

The year concludes with students drawing and constructing geometrical figures in Module 6. They also revisit unknown angle, area, volume, and surface area problems, which now include problems involving percentages of areas or volumes.

Alignment Chart

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 7 Modules[13]
Module 1: **Ratios and Proportional Relationships** (30 days)	**Analyze proportional relationships and use them to solve real-world and mathematical problems.**[14] **7.RP.1** Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. *For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction ½ / ¼ miles per hour, equivalently 2 miles per hour.* **7.RP.2** Recognize and represent proportional relationships between quantities. a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.

[13] When a cluster is referred to in this chart without a footnote, the cluster is taught in its entirety.
[14] Percent and proportional relationships are covered in Module 4.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 7 Modules[13]
	b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. c. Represent proportional relationships by equations. *For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.* d. Explain what a point *(x, y)* on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, *r*) where *r* is the unit rate. **7.RP.3** Use proportional relationships to solve multistep ratio and percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.* **Solve real-life and mathematical problems using numerical and algebraic expressions and equations.**[15] **7.EE.4**[16] Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?* **Draw, construct, and describe geometrical figures and describe the relationships between them.**[17] **7.G.1** Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.

[15] The balance of this cluster is taught in Modules 2, 3, and 4.
[16] In this module, the equations are derived from ratio problems. 7.EE.4a is returned to in Module 2 and Module 3.
[17] 7.G.1 is also covered in Module 4. The balance of this cluster is taught in Module 6.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 7 Modules[13]
Module 2: **Rational Numbers** (30 days)	**Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.** **7.NS.1** Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. a. Describe situations in which opposite quantities combine to make 0. *For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.* b. Understand $p + q$ as the number located a distance $\|q\|$ from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. d. Apply properties of operations as strategies to add and subtract rational numbers. **7.NS.2** Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts. c. Apply properties of operations as strategies to multiply and divide rational numbers.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 7 Modules[13]
	d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats. **7.NS.3** Solve real-world and mathematical problems involving the four operations with rational numbers.[18] **Use properties of operations to generate equivalent expressions.**[19] **7.EE.2**[20] Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. *For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."* **Solve real-life and mathematical problems using numerical and algebraic expressions and equations.**[21] **7.EE.4**[22] Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?*
Module 3: **Expressions and Equations** (35 days)	**Use properties of operations to generate equivalent expressions.** **7.EE.1** Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.

[18] Computations with rational numbers extend the rules for manipulating fractions to complex fractions.
[19] The balance of this cluster is taught in Module 3.
[20] In this module, this standard is applied to expressions with rational numbers in them.
[21] The balance of this cluster is taught in Module 3.
[22] In this module the equations include negative rational numbers.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 7 Modules[13]
	7.EE.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. *For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."*
	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
	7.EE.3[23] Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.*
	7.EE.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?* b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for*

[23] Problems in this module take on any form but percent, which is included in Module 4.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 7 Modules[13]
	the number of sales you need to make, and describe the solutions. **Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.**[24] **7.G.4** Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. **7.G.5** Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. **7.G.6** Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.
Module 4: **Percent and Proportional Relationships**[25] (25 days)	**Analyze proportional relationships and use them to solve real-world and mathematical problems.** **7.RP.1** Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. *For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction ½ / ¼ miles per hour, equivalently 2 miles per hour.* **7.RP.2** Recognize and represent proportional relationships between quantities. a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. c. Represent proportional relationships by equations. *For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.*

[24] Emphasis of 7.G.5 and 7.G.6 in this module is on solving equations. The standards are returned to in Module 6.
[25] The emphasis in this module is on percent.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 7 Modules[13]
	d. Explain what a point *(x, y)* on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, *r*) where *r* is the unit rate. **7.RP.3** Use proportional relationships to solve multistep ratio and percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.* **Solve real-life and mathematical problems using numerical and algebraic expressions and equations.**[26] **7.EE.3** Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.* **Draw, construct, and describe geometrical figures and describe the relationships between them.**[27] **7.G.1** Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.
Module 5: **Statistics and Probability** (25 days)	**Use random sampling to draw inferences about a population.** **7.SP.1** Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.

[26] 7.EE.3 is introduced in Module 3. The balance of this cluster was taught in the first three modules.
[27] 7.G.1 is introduced in Module 1. The balance of this cluster is taught in Module 6.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 7 Modules[13]
	7.SP.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.* **Draw informal comparative inferences about two populations.** **7.SP.3** Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. *For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.* **7.SP.4** Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* **Investigate chance processes and develop, use, and evaluate probability models.** **7.SP.5** Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. **7.SP.6** Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. *For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.*

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 7 Modules[13]
	7.SP.7 Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.* b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?* **7.SP.8** Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event. c. Design and use a simulation to generate frequencies for compound events. *For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?*

Module 6: **Geometry** (35 days)	**Draw, construct, and describe geometrical figures and describe the relationships between them.**[28] **7.G.2** Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. **7.G.3** Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids. **Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.**[29] **7.G.5** Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. **7.G.6** Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

[28] The balance of this cluster is taught in Modules 1 and 4.
[29] 7.G.4 is taught in Module 3; 7.G.5 and 7.G.6 are introduced in Module 3.

Sequence of Grade 8 Modules Aligned with the Standards

Module 1: Integer Exponents and Scientific Notation
Module 2: The Concept of Congruence
Module 3: Similarity
Module 4: Linear Equations
Module 5: Examples of Functions from Geometry
Module 6: Linear Functions
Module 7: Introduction to Irrational Numbers Using Geometry

Summary of Year

Eighth grade mathematics is about (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.

Key Areas of Focus for Grade 8: Linear algebra

CCLS Major Emphasis Clusters
Expressions and Equations • Work with radicals and integer exponents. • Understand the connections between proportional relationships, lines, and linear equations. • Analyze and solve linear equations and pairs of simultaneous linear equations. Functions • Define, evaluate, and compare functions. Geometry • Understand congruence and similarity using physical models, transparencies, or geometry software. • Understand and apply the Pythagorean Theorem.

Rationale for Module Sequence in Grade 8

This year begins with students extending the properties of exponents to integer exponents in Module 1. They use the number line model to support their understanding of the rational numbers and the number system. The number system is revisited at the end of the year (in Module 7) to develop the *real* number line through a detailed study of irrational numbers.

In Module 2, students study congruence by experimenting with rotations, reflections, and translations of geometrical figures. Their study of congruence culminates with an introduction to the Pythagorean Theorem in which the teacher guides students through the "square-within-a-square" proof of the theorem. Students practice the theorem in real-world applications and mathematical problems throughout the year. (In Module 7, students learn to prove the Pythagorean Theorem on their own and are assessed on that knowledge in that module.)

The experimental study of rotations, reflections, and translations in Module 2 prepares students for the more complex work of understanding the effects of dilations on geometrical figures in their study of similarity in Module 3. They use similar triangles to solve unknown angle, side length and area problems. Module 3 concludes with revisiting a proof of the Pythagorean Theorem from the perspective of similar triangles.

In Module 4, students use similar triangles learned in Module 3 to explain why the slope of a line is well-defined. Students learn the connection between proportional relationships, lines, and linear equations as they develop ways to represent a line by different equations ($y = mx + b$, $y - y_1 = m(x - x_1)$, etc.). They analyze and solve linear equations and pairs of simultaneous linear equations. The equation of a line provides a natural transition into the idea of a function explored in the next two modules.

Students are introduced to functions in the context of linear equations and area/volume formulas in Module 5. They define, evaluate, and compare functions using equations of lines as a source of linear functions and area and volume formulas as a source of non-linear functions.

In Module 6, students return to linear functions in the context of statistics and probability as bivariate data provides support in the use of linear functions.

By Module 7 students have been using the Pythagorean Theorem for several months. They are sufficiently prepared to learn and explain a proof of the theorem on their own. The Pythagorean Theorem is also used to motivate a discussion of irrational square roots (irrational cube roots are introduced via volume of a sphere). Thus, as the year began with looking at the number system, so it concludes with students understanding irrational numbers and ways to represent them (radicals, non-repeating decimal expansions) on the real number line.

Alignment Chart

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 8 Modules[30]
Module 1: **Integer Exponents and Scientific Notation** (20 days)	**Work with radicals and integer exponents.**[31] **8.EE.1** Know and apply the properties of integer exponents to generate equivalent numerical expressions. *For example,* $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$. **8.EE.3** Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. *For example, estimate the population of the United States as* 3×10^8 *and the population of the world as* 7×10^9*, and determine that the world population is more than 20 times larger.* **8.EE.4** Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.
Module 2: **The Concept of Congruence** (25 days)	**Understand congruence and similarity using physical models, transparencies, or geometry software.**[32] **8.G.1** Verify experimentally the properties of rotations, reflections, and translations: a. Lines are taken to lines, and line segments to line segments of the same length. b. Angles are taken to angles of the same measure. c. Parallel lines are taken to parallel lines. **8.G.2** Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.

[30] When a cluster is referred to in this chart without a footnote, the cluster is taught in its entirety.
[31] 8.EE.2 is covered in Module 7.
[32] 8.G.3, 8.G.4, and the balance of 8.G.5 are taught in Module 3.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 8 Modules[30]
	8.G.5[33] Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. *For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.* **Understand and apply the Pythagorean Theorem.**[34] 8.G.6[35] Explain a proof of the Pythagorean Theorem and its converse. 8.G.7[36] Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
Module 3: **Similarity** (25 days)	**Understand congruence and similarity using physical models, transparencies, or geometry software.**[37] 8.G.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. 8.G.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them. 8.G.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. *For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.*

[33] Congruence is addressed in this Module. The balance of this standard (similarity) is taught in Module 3.
[34] 8.G.6 and 8.G.7 are also taught in Module 3. The balance of 8.G.6 and 8.G.7 are covered in Module 7, along with standard 8.G.8.
[35] Pythagorean is proved in this module guided by teacher (square within a square proof). Students are not responsible for explaining a proof until Module 7.
[36] This standard is started in this module and practiced during the year. No solutions that involve irrational numbers are introduced until Module 7.
[37] The balance of this cluster is taught in Module 1.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 8 Modules[30]
	Understand and apply the Pythagorean Theorem.[38] 8.G.6[39] Explain a proof of the Pythagorean Theorem and its converse. 8.G.7[40] Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
Module 4: **Linear Equations** (40 days)	**Understand the connections between proportional relationships, lines, and linear equations.** 8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.* 8.EE.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b. **Analyze and solve linear equations and pairs of simultaneous linear equations.** 8.EE.7 Solve linear equations in one variable. a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

[38] 8.G.6 and 8.G.7 are also taught in Module 2. The balance of standards 8.G.6 and 8.G.7 are covered in Module 7, along with standard 8.G.8.
[39] Pythagorean is proved in this module guided by teacher (proof using similar triangles). Students are not responsible for explaining a proof until Module 7.
[40] This standard is started in this module and practiced during the year. No solutions that involve irrational numbers are introduced until Module 7.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 8 Modules[30]
	8.EE.8 Analyze and solve pairs of simultaneous linear equations. a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. *For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.* c. Solve real-world and mathematical problems leading to two linear equations in two variables. *For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.*
Module 5: **Examples of Functions from Geometry** (15 days)	**Define, evaluate, and compare functions.**[41] **8.F.1** Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.[42] **8.F.2** Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.* **8.F.3** Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. *For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.*

[41] Linear and non-linear functions are compared in this module using linear equations and area/volume formulas as examples.
[42] Function notation is not required in Grade 8.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 8 Modules[30]
	Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres. 8.G.9[43] Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.
Module 6: **Linear Functions** (20 days)	**Use functions to model relationships between quantities.** 8.F.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two *(x, y)* values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. 8.F.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. **Investigate patterns of association in bivariate data.**[44] 8.SP.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association. 8.SP.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line. 8.SP.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.*

[43] Solutions that introduce irrational numbers are not introduced until Module 7.
[44] 8.SP standards are used as applications to the work done with 8.F standards.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 8 Modules[30]
	8.SP.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*
Module 7: **Introduction to Irrational Numbers Using Geometry** (35 days)	**Know that there are numbers that are not rational, and approximate them by rational numbers.** 8.NS.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. 8.NS.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). *For example, by truncating the decimal expansion of √2, show that √2 is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.* **Work with radicals and integer exponents.**[45] 8.EE.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that √2 is irrational. **Understand and apply the Pythagorean Theorem.** 8.G.6 Explain a proof of the Pythagorean Theorem and its converse. 8.G.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.

[45] The balance of this cluster is taught in Module 1.

Module and Approximate Number of Instructional Days	Common Core Learning Standards Addressed in Grade 8 Modules[30]
	8.G.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system. **Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.** 8.G.9 Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.[46]

[46] Solutions that introduce irrational numbers are allowed in this module.

Education

ELA CURRICULUM: GRADES 6-8 CURRICULUM PLAN

		Module 1: Close Reading and Writing to Learn	Module 2A: Working with Evidence	Module 3A: Understanding Perspectives	Module 4: Research, Decision Making, and Forming Positions
GRADE 6	Topic	**Myths: Not Just Long Ago**	**Rules to Live By**	**The Land of the Golden Mountain**	**Insecticides: Costs vs. Benefits**
	Central Texts*	RL—*The Lightning Thief*, Rick Riordan	RL—*Bud, Not Buddy*, Christopher Paul Curtis RI—"Stanford University Commencement Address," Steve Jobs	RL—*Dragonwings*, Laurence Yep RI—"Comprehending the Calamity," Emma M. Burke	RL—*Frightful's Mountain*, Jean Craighead George RI—"The Exterminator," Kristen Weir
	Writing Tasks**	• Literary Analysis—Connecting Themes in Cronus and *The Lightning Thief* (RL.6.2, W.6.2, 6.9) • My Hero's Journey Narrative (RL.6.3, W.6.3)	• Argument: How Does Bud Use His Rules—to Survive or to Thrive? (RL.6.3, W.6.1, 6.9) • Research/Inform: "My Rule to Live By" (RL.6.3, W.6.2)	• Literary Analysis: How Do the Author's Purposes Affect the Narrator's Points of View? (W.6.2, 6.9) • Newspaper Article: How the 1906 San Francisco Earthquake and Fire Affected the People of San Francisco (W.6.2, 6.7)	• Research Simulation (W.6.7, 6.8, 6.9) • Position Paper: Do the Benefits of DDT Outweigh Its Harmful Consequences? (W.6.1, 6.9)
GRADE 7	Topic	**Journeys and Survival**	**Working Conditions**	**Slavery: The People Could Fly**	**Screen Time and the Developing Brain**
	Central Texts*	RL—*A Long Walk to Water*, Linda Sue Park RI—"Sudanese Tribes Confront Modern War," Karl Vick	RL—*Lyddie*, Katherine Patterson RI—"Commonwealth Club Address," César Chávez	RI—*Narrative of the Life of Frederick Douglass* (excerpts)	No text purchase required; students will read articles only about the adolescent brain and the effects of technology use, provided in lesson supporting materials.
	Writing Tasks**	• Literary Analysis: Writing about the Theme of Survival (RL.7.1, 7.2, W.7.2, 7.9) • Research-based Two-Voice Poem (RL.7.6, W.7.3, 7.9)	• Argument: Should Lyddie Sign the Petition? (RL.7.3, W.7.1) • Consumer's Guide to Working Conditions in the Garment Industry (W.7.2, 7.6, 7.7)	• Literary Nonfiction Analysis: Analyzing Douglass's Position in the *Narrative* (RI.7.2, 7.6, W.7.2, 7.9) • Children's Book to Retell an Episode from the *Narrative* (W.7.3, 7.9)	• Research Simulation (W.7.7, 7.8, 7.9) • Position Paper: Should the American Academy of Pediatrics raise its recommended daily entertainment screen time from two hours to four hours? (RI.7.1, W.7.1, 7.4, and 7.5)
GRADE 8	Topic	**Finding Home: Refugees**	**Working with Evidence: Taking a Stand**	**Japanese American Relations in WWII**	**Sustainability of World's Food Supply**
	Central Texts*	RL – *Inside Out & Back Again*, Thanhha Lai* RI—"The Vietnam Wars," Tod Olson	RL—*To Kill a Mockingbird*, Harper Lee RI—"Equal Rights for Women," Chisholm RI—"Ain't I a Woman?" Sojourner Truth	RI—*Unbroken: A World War II Story of Survival, Resilience, and Redemption*, Laura Hillenbrand	RI—*The Omnivore's Dilemma: The Secrets Behind What You Eat*, Michael Pollan (Young Readers' Edition)
	Writing Tasks**	• Literary Analysis: Explain the Significance of the Novel's Title (RL.8.1, 8.3, RI.8.1, W.8.2, 8.9) • Research-based Free Verse Narrative Poems: "Inside Out" and "Back Again" (RI.8.1, 8.2, W.8.3, 8.9)	• Argument: Taking a Stand (RL.8.1, 8.2, 8.3, W.8.1) • Readers Theater and Analytical Commentary: Taking a Stand in Maycomb (RL.8.11, W.8.3, 8.11)	• Informational Essay: Invisibility of Captives during WWII (RI.8.1, W.8.2, 8.9) • Research-based Narrative: Becoming Visible after Internment (RI.8.1, W.8.3)	• Research Simulation (W.8.7, 8.8, 8.9) • Position Paper: Which of Michael Pollan's Four Food Chains Would Best Feed the United States? (W.8.1, 8.9)

* This plan shows most full-length books all students read, and a few key articles. See separate document "Trade Books and Other Resources" for a complete list of resources needed in order to implement the modules.
** This plan shows the two main writing tasks per module and the standards most central to each task. See Curriculum Map for the full list of standards assessed (including the writing process and language standards). For seventh grade specifically, two options for Module 4 will be available: 7M4A: (topic TBD) and 7M4B: "Water Is Life".

Education

ELA CURRICULUM: GRADES 6-8 CURRICULUM PLAN (FOR ALTERNATE MODULES)

		Module 2B: Working with Evidence	Module 3B: Understanding Perspectives	Module 4B: Research, Decision Making, and Forming Positions
GRADE 6	Topic	Voices of Adversity	Sustaining the Oceans	N/A
	Central Texts*	RL - *Good Masters! Sweet Ladies! Voices from a Medieval Village*, Laura Amy Schlitz RL - *Blue Lipstick: Concrete Poems*, John Grandits RL - *Technically, It's Not My Fault: Concrete Poems*, John Grandits	RI - *World Without Fish*, Mark Kurlansky RL - *Flush*, Carl Hiassen	GRADE 7 ONLY
	Writing Tasks**	• Argument Essay: Do We Face the Same Adversities as the Voices of *Good Masters, Sweet Ladies*? (W.6.1 and 6.9) • Narrative: Giving Voice to Adversity (W.6.3, 6.11c, SL.6.4 and 6.6)	• Research (W.6.7) • Informational Consumer Guide (W.6.2)	GRADE 7 ONLY
GRADE 7	Topic	Identify and Transformation: Then and Now	N/A	Water is Life
	Central Texts*	RL - *Pygmalion*, George Bernard Shaw RI – Various informational articles about identify	Please note that, for 7th grade, alternate modules will be available for Modules 2 and 4, rather than for Modules 2 and 3.	RI— *The Big Thirst*, Charles Fishman RI—"Water Is Life," Barbara Kingsolver
	Writing Tasks**	• Argument Essay: Eliza's Changes (RL.7.1, 7.3, and W.7.1) • Advertisement Analysis and "Counter-Ad" (W.7.2a, b, c, d, e, f, 7.7, and 7.8)		• Research Simulation (W.7.7, 7.8, 7.9) • Water Management Position Paper:(RI.7.1, W.7.1, 7.4, 7.5, and L.7.6)
GRADE 8	Topic	A Midsummer Night's Dream and the Comedy of Control	The Civil Rights Movement and the Little Rock Nine	N/A
	Central Texts*	RL - *A Midsummer Night's Dream*, William Shakespeare RI – Various informational articles about Shakespeare and the universal appeal of his works	RI - *A Mighty Long Way: My Journey to Justice at Little Rock Central High School*, Carlotta Walls LaNier and Lisa Frazier Page RI - *Little Rock Girl 1957: How a Photograph Changed the Fight for Integration*, Shelley Tougas	GRADE 7 ONLY
	Writing Tasks**	• Argument Essay: Controlling Others in *A Midsummer Night's Dream* (W.8.1) • Character Confessional Narrative (RL.8.2, 8.3, W.8.3, 8.4, 8.9a, and 8.11b)	• Informational Essay: The Role of the Media in the Story of the Little Rock Nine (W.8.2) • On-Demand Writing: Photograph and Song Choices for a Film (W.8.1 and W.8.2)***	GRADE 7 ONLY

* This plan shows most full-length books students read, and a few key articles. See separate document "Trade Books and Other Resources" for a complete list of resources needed in order to implement the modules.

** This plan shows the two main writing tasks per module and the standards most central to each task. See Curriculum Map for the full list of standards assessed (including the writing process and language standards) For seventh grade specifically, two options for Module 4 will be available: 7M4A: (topic TBD) and 7M4B: "Water Is Life".

*** For 8M3B, the End of Unit 3 Assessment combines both W.1 (argument) and W.2 (informative writing). This differs from 8M3A, for which the Unit 3 writing focuses on narrative (W.3).