

ACCELERATED MATH 6 AND SCIENCE 6
2021-2022 Combined Syllabus

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The purpose of this document is to provide an overview of the Accelerated Math 6 and Science 6 courses, including their broad objectives, learning targets, learning and grading practices, and classroom expectations. A Suggested Supply List is included. If you have any questions about the courses, please email me at any time (rfeiler@murrieta.k12.ca.us).

Accelerated Math 6

The study of mathematics teaches us to reason quantitatively, abstractly, logically, spatially, and critically. Becoming a powerful user of mathematics allow student to better understand and impact their world.

The broad objectives of this course are for students to be able to:

- (1) Use concepts of ratio and rate to solve problems, particularly with percents;
- (2) Understand division of fractions;
- (3) Extend the rational number system to include negative numbers;
- (4) Write, interpret, and use expressions and equations;
- (5) Develop statistical thinking;
- (6) Develop formulas for areas of polygons and surface areas of prisms and pyramids;
- (7) Use the Standards for Mathematical Practice to (SMPs) make sense, reason, communicate, and model with mathematics.

The specific learning targets for Accelerated Math 6 are attached (or in a separate digital document).

Science 6

The study of science develops our abilities to ask questions, collect information, solve problems, as well as to test and communicate ideas while making sense of the world around us.

The guiding concept of sixth grade science is that *systems within organisms and between them are adapted to Earth's climate systems*. The broad objectives of this course are for students to demonstrate an understanding of:

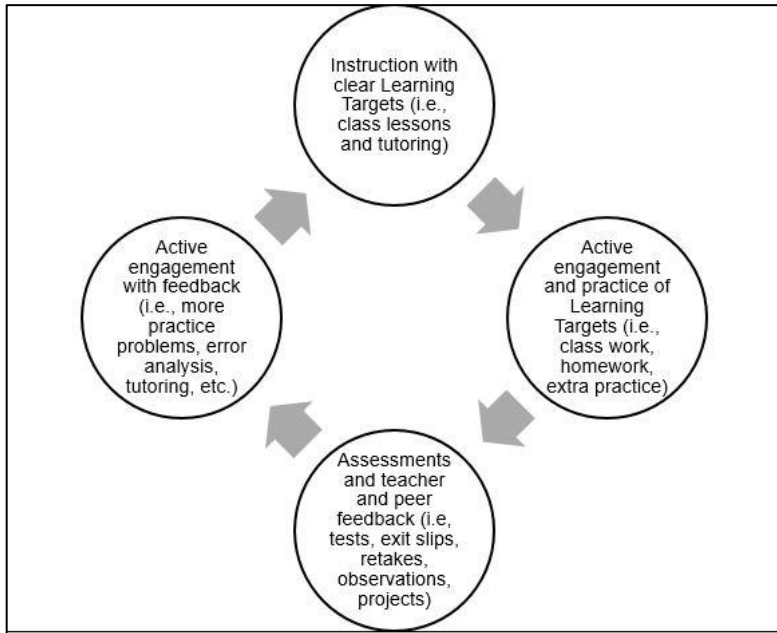
- (1) how kinetic/thermal energy moves through objects and systems;
- (2) how weather conditions result from the interactions among different Earth subsystems;
- (3) the human impact on climate change;
- (4) how cells and organisms relate in a living system;
- (5) How genetics determine growth and characteristics of organisms;
- (6) How to use the Science and Engineering Practices (SEPs) to investigate, develop explanations and solutions, and evaluate claims and evidence.

The specific learning targets for Science 6 are attached (or in a separate digital document).

Learning and Grading Practices (adapted from Ms. Lee-Ortiz at the UCLA Community School)

Each day in our classes students will be using problem-solving strategies, questioning, investigating, analyzing critically, gathering and constructing evidence, and communicating rigorous arguments to justify their thinking. Under teacher guidance, students learn in collaborations with others while sharing information, expertise, and ideas.

Learning opportunities will be created around this Cycle for Mastery Learning:



Cycles for Mastery Learning process graphic shows how teachers and students move from instruction with clear learning targets to active engagement and practice of the learning targets, assess through teacher and peer feedback, and engage with the feedback to understand next steps.

Mastery Learning and Grading is based on demonstration of content knowledge and skills, as specified in the Learning Target for each course (see attached).

Rubrics, checklists, and scoring guides will be used to provide regular feedback so that student can improve and focus on learning. Students will have multiple opportunities to demonstrate mastery of the learning target. In this way, the focus is on showing growth and heading toward mastery with each learning opportunity.

Not all assignments will be graded. Practice assignments will receive feedback and completion of practice assignments is essential for learning (all work in these courses is tied to a learning target). Assignments that receive grades will be graded on the following rubric to support the learning process and student success:

Mastery Rubric

Level	Description
4 – Mastery	You have demonstrated complete and detailed understanding of the learning target and can apply it to new problems.
3 – Proficiency	You have a firm grasp of the learning target and have demonstrated understanding of the concepts involved but may be inconsistent or may have minor misunderstandings and errors.

Level	Description
2 – Basic	You have demonstrated some conceptual understanding of the learning target but still have some confusion of key ideas or make errors more than occasionally.
1 – Beginning	You have demonstrated little or unclear understanding or have multiple misunderstandings about the learning target.
0 – Not yet	You have not attempted this learning target yet or have not turned in work for this learning target to be assessed.

We all learn at different rates and in different ways, so grades will be based on learning over time, after many opportunities for practice with feedback. Progress report and semester grades will be determined on the achievement, consistency, and improvement of mastering the Learning Targets evidenced by assessments and work submitted.

Progress Report and Semester Letter Grades

Grade	Description
A	Demonstrate mostly Mastery (4) level in Learning Targets, and nothing less than a 3 in the other Learning Targets
B	Demonstrate at least Proficiency (3) level in most Learning Targets, and nothing less than a 2 in the other Learning Targets
C	Demonstrate at least Basic Understanding (2) level in all the Learning Targets
D	Demonstrate at least Beginning (1) level in all Learning Targets
F	Demonstrate that few or none of the Learning Targets are achieved with at least a Beginning (1) level

Classroom Expectations

Making the transition to middle school is a significant event for students; this year may have added elements as most students are also transitioning back to fully in-person learning for the first time in over a year. Our first six weeks of school will include many classroom activities designed to help students understand how to be successful in middle school and to build our classroom community of learners. Students are also expected to be familiar with school rules and policies, which can be found in the Handbook pages included in the TMS Student Planner students receive at registration/textbook pickup.

The most important expectation in our class will be **communication**. Our school district provides many tools for students and adults to stay informed. Please be sure that you have access to Canvas (adults can be observers for their students' courses) and that you have set your communication preferences in AERIES so that class updates and messages about you or your student reach you. Directions for setting up your access can be found on the TMS website. Please contact the school office if you need assistance with getting access.

Most concerns about learning, the classroom experience, and grades can be resolved with timely communication. Students may feel too nervous or embarrassed to talk with the teacher. This is a learning opportunity to practice how to have a challenging conversation. Please know that I welcome questions and feedback from students and adults. The more I understand the needs of my students, the more effective I can be. The best way to reach me for an immediate response is through email (rfeiler@murrieta.k12.ca.us). I am happy to schedule in-person, telephone, or video conferences as needed.

Suggested Supply List for Math and Science

Bring to school every day:

- 3-ring binder with dividers for classes (can be shared with other subjects as well)
- Plenty of paper - graph paper recommended for math, but not required
- Pencils with erasers
- Pencil sharpener that can catch its shavings, or extra lead for mechanical pencils
- Colored pens/pencils or fine-tip markers to enhance notes or use for science assignments
- 3 highlighters in different colors (very handy for color-coding notes)
- 6-inch or 12-inch ruler

Have at home:

- 3-hole punch
- stapler
- scissors
- tape or glue stick

I appreciate your support if you can consider purchasing extras of any of these supplies to donate to our class, especially paper, pens, highlighters, and pencils. Expo whiteboard markers are also helpful.