



6th grade Science Guide
2023-2024
SCI601/602 & SCI6010/6020

<http://grading.dmschools.org>

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Foreword

The purpose of this guide is to:

- Provide guidance for scoring student evidence.
- Identify pacing for evidence collection.

This curriculum guide is *not...*

- Used for designing instruction (you'll use your curricular materials for that – working through each lesson as designed).
- Meant to restrict your creativity as a teacher.
- A ceiling of what your students can learn, nor a set of unattainable goals.

Instead, the curriculum guide *is* meant to be a common vision for student learning and a set of targets and success criteria directed related to grade level standards by which to measure and report student progress and provide meaningful feedback.

The curriculum guide outlines the learning that is **most essential** for student success; it is our district's guaranteed and viable curriculum. The expectation is that every student in our district, regardless of school or classroom, will have access to and learn these targets. As the classroom teacher, you should use the materials within our adopted curriculum to help you to scaffold up to the learning targets and extend your students' learning beyond them.

Please consider this guide a living and dynamic document, subject to change and a part of a continuous feedback loop.

6th grade: Year at a Glance

Curriculum Access: [OpenSciEd](#)

Semester 1	Topic 1: Light & Matter	Topic 2: Thermal Energy	Topic 3: Weather, Climate & Water Cycling
Reporting frequency of topic scores	4 weeks	8 weeks	6 weeks
Approximate beginning and end dates for the topics	8/28 – 9/22	9/26 – 11/21	11/27 – 1/12
Specific Pacing			Lesson Set 3 and 4 (Optional)
Standards Aligned	MS-PS4-2 , MS-LS1-8	MS-PS1-4 , MS-PS3-5 , MS-PS3-3 , MS-PS3-4 , MS-ETS1-4	MS-ESS2-4 , MS-ESS2-5 , MS-ESS2-6

Semester 2	Topic 4: Plate Tectonics	Topic 5: Natural Hazards	Topic 6: Cells & Systems
Reporting frequency of topic scores	6 weeks	4 weeks	6 weeks
Approximate beginning and end dates for the topics	1/18 – 3/1	3/04- 4/12	4/15 – 5/24
Specific Pacing			
Standards Aligned	MS-ESS1-4 , MS-ESS2-1 , MS-ESS2-2 , MS-ESS2-3	MS-ESS2-3 , MS-PS4-3 , MS-ETS1-1 , MS-ETS1-2	MS-LS1-1 , MS-LS1-2 , MS-LS1-3 , MS-LS1-8

Standards-Referenced Grading Basics

Our purpose in collecting a body of evidence is to:

- Allow teachers to determine a defensible and credible topic score based on a representation of student learning over time.
- Clearly communicate where a student’s learning is based on a topic scale to inform instructional decisions and push student growth.
- Show student learning of targets through multiple and varying points of data
- Provide opportunities for feedback between student and teacher.

Start at Level 3 when determining a topic → score.

Scoring

A collaborative scoring process is encouraged to align expectations of the scale to artifacts collected. Routine use of a collaborative planning and scoring protocol results in calibration and a collective understanding of evidence of mastery. Enough evidence should be collected to accurately represent a progression of student learning as measured by the topic scale. Teachers look at all available evidence to determine a topic score. All topic scores should be defensible and credible through a body of evidence.

*****Only scores of 4, 3.5, 3, 2.5, 2, 1.5, 1, and 0 can be entered as Topic Scores.**

Multiple Opportunities

Philosophically, there are two forms of multiple opportunities, both of which require backwards design and intentional planning. One form is opportunities planned by the teacher throughout the unit of study and/or throughout the semester. The other form is reassessment of learning which happens after completing assessment of learning at the end of a unit or chunk of learning.

Students will be allowed multiple opportunities to demonstrate proficiency. Teachers need reliable pieces of evidence to be confident students have a good grasp of the learning topics before deciding a final topic score. To make standards-referenced grading work, the idea of “multiple opportunities” is emphasized. If after these opportunities students still have not mastered Level 3, they may then be afforded the chance to reassess.

Evidence shows the student ...	Topic Score
Demonstrates proficiency (AT) in all learning targets and success at Level 4	4.0
Demonstrates proficiency (AT) in all learning targets with partial success at Level 4	3.5
Demonstrates proficiency (AT) in all learning targets	3.0
Demonstrates proficiency (AT) in at least half of the learning targets	2.5
Demonstrates some success criteria (PT) toward all learning targets	2.0
Demonstrates some success criteria (PT) towards some of the learning targets	1.5
Does not yet meet minimum criteria for the targets.	1.0
Produces no evidence appropriate to the learning targets at any level	0

Guiding Practices of Standards-Referenced Grading

1. A consistent 4-point grading scale will be used.
2. Student achievement and behavior will be reported separately.
3. Scores will be based on a body of evidence.
4. Achievement will be organized by learning topic and converted to a grade at semester’s end.
5. Students will have multiple opportunities to demonstrate proficiency.
6. Accommodations and modifications will be provided for exceptional learners.

Anatomy of a Scale-

Unit Narrative:

Provide an overview and context of the unit, big understandings, and student experience—including by not limited to vocabulary, inquiry-based questions/concepts, pacing and number of lessons

Topic Title:

Named topic in infinite campus, with approximate number of paced weeks

Exceeding Grade Level (ET):

Possible level four task listed including prior learning, cognitive complexity, integrated skills, real world relevance: authentic application beyond the classroom.

Achieving Grade Level (AT):

Level 3 targets are listed within the topic scale and are the grade level expectation for students in all classes.

Success Criteria (listed below the target) should be clarified/ revised by the building level PLC as they collaborate to unpack the Level 3 targets.

Item Bank:

Linked resources for each learning target. Guiding/Inquiry questions, ideas, and/or concepts are below the base line examples to ensure district wide coherence.

Unit 1:		
Unit Narrative: In this unit, students		
Topic	Exceeding Grade Level (ET)	Achieving Grade Level (AT)
When collecting evidence related to the 3, it will be recorded in these topics in Infinite Campus.		The Level 3 Targets are the grade level expectation for students in all classes. Success Criteria (listed below the target) should be clarified/ revised by the building level PLC as they collaborate to unpack the Level 3 targets.
		Guiding Question to complete this process: * What are the essential pieces of knowledge students need to have to show progression towards the grade level standard/expectation (level 3)?
	Possible Task: * *A level four task should include the following: prior learning; cognitive complexity; integrated skills; real world relevance; authentic application beyond the classroom.	LT1- Learning that shows evidence of progressing towards the grade level learning target: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> LT2- Learning that shows evidence of progressing towards the grade level learning target: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> LT3- Learning that shows evidence of progressing towards the grade level learning target: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Topic Title (weeks)		

Item Bank:		
Target:	Target:	Target:
Resources to teach:	Resources to teach:	Resources to teach:
Standard Language	Standard Language	Standard Language
Guiding Questions, Ideas, and/or Concepts		
Ideas and concepts in the spaces below are base line examples for all to use to ensure district wide coherence. Please add to these as you see instructional opportunities.		

Unit I: Light & Matter

Unit Narrative from [OpenSciEd](#)

Driving Question: Why do we sometimes see different things when looking at the same object?

Topic	Achieving Grade Level (AT)
<p>When collecting evidence related to these targets, it will be recorded in this topic in Infinite Campus.</p>	<p>The Level 3 Targets are the grade level expectation for students in all classes. Success Criteria are provided below each target.</p>
<p>Light & Matter 4 weeks 8/28 – 10/22</p>	<p>LT1A- Develop and use a model to describe that path of light are reflected and transmitted through various materials. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify the components of a system and explain the interactions. Addressed: Lesson 1 <input type="checkbox"/> Describe the relationship between the components and how the light interacts with materials. Addressed: Lessons 2 and 3 <input type="checkbox"/> Modify a model to describe light interaction when given new evidence. Addressed: Lessons 2, 5, 6 and 8 <p>LT1B- Synthesize information that perspective changes based on the amount of light. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Explain how light changes when it travels through different materials. Addressed: Lessons 3, 4, 6, and 7 <input type="checkbox"/> Explain how the shape and composition of the lens causes the path of light to change directions (refract) before reaching the retina at the back of the eye. Addressed: Lessons 6 and 8

Resources

[Teams Folder](#)

Need more help? Check out the [Unit Webinar](#) for Teachers

LTIA

Assessment Opportunities

- Lesson 1:** Preassessment
- Lesson 2:** Day 2 – initial models
- Lesson 5:** Models
- Lesson 7:** Explanation of Revised Models
- Lesson 8:** Portraits through Glass

LTIB

Assessment Opportunities

- Lesson 3:** Progress Tracker and formatively assessing during investigation
- Lesson 6:** Formatively assess discussion
- Lesson 8:** Portraits through Glass
- Lesson 8:** Explaining New Phenomena

Consumable and locally sourced materials

[Review full list of materials here](#)

- Battery, 9V
- Battery, AA
- Index card, 3x5
- Sticker dots
- Sticky note, 3 x 3
- Sticky note, 5 x 7 or 6 x 8
- Sticky tack
- Tape, duct
- Tape, masking
- Tape, transparent
-

- Binder clip
- Book/block
- Box cutter
- Chart paper
- Highlighter
- Marker, colored
- Marker, permanent black
- Paper, white, 8.5 x 11
- Pencil, colored
- Small toys or objects
- Yardstick
- [Copies of Lesson 7 Assessment](#)
- [Copies of Lesson 8 Assessment](#)
- [Copies of Lesson 8 Explaining New Phenomena \(optional assessment\)](#)

Unit 2: Thermal Energy

Unit Narrative from [OpenSciEd](#)

Driving Question: How can containers keep stuff from warming up or cooling down?

Topic	Achieving Grade Level (AT)
<p>When collecting evidence related to these targets, it will be recorded in this topic in Infinite Campus.</p>	<p>The Level 3 Targets are the grade level expectations for students in all classes. <i>Success Criteria are provided below each target.</i></p>
<p>Thermal Energy 8 Weeks 10/26 – 11/21</p>	<p>LT2A- Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify the components of a system and explain the interactions. Addressed: Lessons 1, 3, 6 and 14 <input type="checkbox"/> Describe the relationship between the components and how the waves interact with materials. Addressed: Lessons 1, 3, 6 and 14 <p>LT2B- Plan an investigation to determine the relationships among the energy transferred, type of matter, mass and change in the average kinetic energy of the particles as measured by the temperature of the sample. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Plan and carry out investigations to test the different parts of the system, tracking the flow of matter and energy into or out of the system. Addressed: Lessons 2, 4, and 6 <input type="checkbox"/> Revise models to include factors that minimize energy transfer by reducing the absorption of light and decreasing the opportunities for particle collisions. Addressed: Lessons 3, 5, 6 and 8 <p>LT2C- Construct arguments to support the claim that when the motion of an object changes, energy is transferred to or from the object. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Make a claim based on a phenomenon that when kinetic energy of an object changes, energy is transferred. Addressed: Lessons 5, 6, 10, 14 and 18 <input type="checkbox"/> Describe evidence and provide reasoning for how it supports the claim. Addressed: Lessons 5, 6, 10, 14 and 18 <p>LT2D- Design, construct, and test a device that minimizes thermal energy transfer. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Apply learning about cup features that can slow energy transfer to design and build, test, and retest a cup system to keep a drink cold. Addressed: Lessons 15-18

Resources

[Teams Folder](#)

Need more help? Check out the [Unit Webinar](#) for Teachers

LT2A	LT2B	LT2C	LT2D
<p style="text-align: center;">Assessment Opportunities</p> <p>Lesson 1: Initial model (pre-assessment)</p> <p>Lesson 3: Task part 3, examine student notebook for model</p> <p>Lesson 6: Effects of Lid Design Assessment, questions 3-5</p> <p>Lesson 14: Icing Injuries Assessment, questions 4-6</p>	<p style="text-align: center;">Assessment Opportunities</p> <p>Lesson 2: Task parts 3 and 4</p> <p>Lesson 3: Task part 6, examine student investigation plan</p> <p>Lesson 6: Effects of Lid Design Assessment</p>	<p style="text-align: center;">Assessment Opportunities</p> <p>Lesson 5: Cold Lemonade Assessment (supports argument development)</p> <p>Lesson 6: Effects of Lid Design Assessment, questions 3-5</p> <p>Lesson 14: Icing Injuries Assessment, questions 1-3</p> <p>Lesson 18: Disaster Blanket Assessment, questions 1 and 3</p>	<p style="text-align: center;">Assessment Opportunities</p> <p>Lesson 18: Disaster Blanket Assessment, questions 2</p>

Consumable and locally sourced materials

[Review full list of materials here](#)

<ul style="list-style-type: none"> • Sticky dot • Sticky note, 3x3 • Straw • Tape, masking • Tape, transparent • Butter • Calculator • Chart paper • Cooler • Knife • Marker • Paper towels or tissue, white • Pencils, colored • Perfume, scented oil, smelly food item • Pitcher, 2 qt • Ruler • Scissors • Spoon • Timer/stopwatch • Utility knife • Wood block 	<ul style="list-style-type: none"> • Aluminum foil • Candle, tealight (votive) • Cardboard wrap piece • Cotton ball • Cup sleeve, cardboard • Cup, 8 oz., styrene • Cup, 9 oz, clear plastic • Cup, 16 oz, paper • Cup, 16 oz, single-wall clear plastic • Felt • Foam sheet • Food coloring, liquid • Glue • Index cards, 3x5 • Paint brush, foam, 1" • Paint, black, 16 oz. • Paint, white, 16 oz. • Plastic wrap, clear • Copies of Lesson 5 Assessment – Cold Lemonade on a Hot Day! • Copies of Lesson 6 Assessment • Copies of Lesson 14 Assessment – Icing Injuries • Copies of Lesson 18 Assessment – Disaster Blanket
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Unit 3: Weather, Climate & Water Cycling

Topic Narrative from [OpenSciEd](#)

Driving Question: How does a lot of hail, rain, or snow fall at some times and not others?

Topic	Achieving Grade Level (AT)
<p>When collecting evidence related to these targets, it will be recorded in this topic in Infinite Campus.</p>	<p>The Level 3 Targets are the grade level expectation for students in all classes. <i>Success Criteria are provided below each target.</i></p>
<p style="text-align: center;">Weather, Climate, & Water Cycling 6 Weeks 11/27-1/12</p>	<p>LT3A- Analyze data to construct a claim for how the motions and complex interactions of air masses result in changes in weather conditions. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Collect and analyze data to identify ground and surface air temperature patterns. Addressed: Lessons 2, 3 and 4 <input type="checkbox"/> Construct a claim using data on the movement of air and its effects on the weather. Addressed: Lessons 2, 3, 4 and 5 <p>LT3B- Develop a model to describe the unobservable mechanisms that drive the cycling of energy through Earth’s systems. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Explain how characteristics of surface materials impact energy flowing into and out of the atmospheric gasses (including water vapor). Addressed: Lessons 7, 8 and 12 <input type="checkbox"/> Model how atmospheric gases (including water vapor) experience energy flows shown in temperature changes affecting phase change, density and motions of air parcels. Addressed: Lessons 7, 8, 10 and 13 <p>LT3C- Construct an explanation about the patterns that cause change in weather based on the transfer of energy. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Explain mechanisms which drive weather system patterns in temperature, precipitation, and air movement. Addressed: Lessons 8, 9, 10, 11 and 12 <input type="checkbox"/> Diagram cause and effect relationships of energy to land, oceans and air creating change in weather. Addressed: Lessons 8, 10 and 12

Resources

[Teams Folder](#)

Need more help? Check out the [Unit Webinar](#) for Teachers

LT3A Assessment Opportunities	LT3B Assessment Opportunities	LT3C Assessment Opportunities
<p>Lesson 2: Day 1 – Exit Ticket</p> <p>Lesson 3: Progress Tracker</p> <p>Lesson 4: Sunlight and Temperature Investigation</p> <p>Lesson 5: Progress Tracker</p> <p>Lesson 6: Explaining the Movement of Air in a Hailstorm</p>	<p>Lesson 7: Day 1 Exit Ticket</p> <p>Lesson 7: Feedback on their models using Model for How Water gets back into Air</p> <p>Lesson 8: Progress Tracker</p> <p>Lesson 10: Simulation Revision</p> <p>Lesson 11: Progress Tracker</p> <p>Lesson 13: Hurricane Assessment</p>	<p>Lesson 9: Exploring an Anchoring Phenomenon</p> <p>Lesson 10: End of Day 2 Explanation</p> <p>Lesson 12: Explaining Convection in the Air Outside</p> <p>Lesson 12: Progress Tracker</p> <p>Lesson 13: Hurricane Assessment</p>

Consumable and locally sourced materials

[Review full list of materials here](#)

<ul style="list-style-type: none"> • Box cutter • Chart paper • Dirt • Freezer • Ice cube • Marker, black • Meter stick • Paper clips • Paper towel • Pencils, colored, set of 6 • Rock, 1" diameter • Rubber band (size 33, 3-1/2 x 1/8") • Ruler • Sand, dry • Sand, wet • Scissors • Sod piece, 4x4" • Spoon, plastic • Tissue paper (facial tissue) • Toothpick Dish soap • Food coloring, blue • Food coloring, red 	<ul style="list-style-type: none"> • Freezer bag, quart, sealable • Glycerin • Pipette, 6" disposable • Sticky dots • Sticky note, 3x3" • Sticky note, 3x3", different color • Sticky note, 3x5" • Straw, bendable, compostable • Super glue • Tape, packing • Tape, transparent • Wax paper • Yarn • Balloon, mylar, helium-filled • Binder clip, 2" • Bottle, 2 L plastic with cap • Optional Lesson set 3 and 4 Student Workbook • Copies of Lesson 6 Assessment • Copies of Lesson 13 Assessment
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Unit 4: Plate Tectonics & Rocky Cycling

Unit Narrative from [OpenSciEd](#)

Driving Question: What causes Earth’s surface to change?

Topic	Achieving Grade Level (AT)
<p>When collecting evidence related to these targets, it will be recorded in this topic in Infinite Campus.</p>	<p>The Level 3 Targets are the grade-level expectations for students in all classes. <i>Success Criteria</i> are provided below each target.</p>
<p>Plate Tectonics & Rock Cycling 6 Weeks 1/18 – 3/1</p>	<p>LT4A- Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyze multiple sources of data and information over multiple scales to identify patterns. Addressed: Lessons 4, 5 and 8 <input type="checkbox"/> Develop a model to show how plates interact with one another over time to form landforms. Addressed: Lessons 1, 2, 6 and 11 <p>LT4B- Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Describe the impact of erosional forces and their energy source on Earth’s surface and the cycling of materials. Addressed: Lessons 8 and 9 <input type="checkbox"/> Describe how materials are cycled in Earth’s interior and connections to surface processes. Addressed: Lessons 3, 4 and 9 <p>LT4C- Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyze data from plate movement data to describe what is happening on the seafloor. Addressed: Lessons 10 <input type="checkbox"/> Analyze interactions in land masses to determine what is happening to the seafloor and plates near trenches. Addressed: Lessons 7, 11 and 12 <input type="checkbox"/> Explain patterns across continents based upon rocks, fossils, land and water patterns. Addressed: Lessons 13

Resources

[Teams Folder](#)

Need more help? Check out the [Unit Webinar](#) for Teachers

LT4A

Assessment Opportunities

- Lesson 6:** Models and explanation on day 3
- Lesson 11:** Create a Map that Represents a Claim
- Lesson 14:** Fossil Assessment

LT4B

Assessment Opportunities

- Lesson 3:** Progress Tracker
- Lesson 8:** Progress Tracker
- Lesson 13:** Erosion Rates vs Uplift Rates
- Lesson 14:** Fossil Assessment

LT4C

Assessment Opportunities

- Lesson 10:** Exit Ticket
- Lesson 11:** Create a Map that Represents a Claim
- Lesson 13:** Erosion Rates vs Uplift Rates
- Lesson 14:** Fossil Assessment

Consumable and locally sourced materials

[Review full list of materials here](#)

- Aluminum foil, 4x4" piece
- Foam board, pink, 12 x 12 x 1/2" piece
- Food coloring, 1 oz bottle
- Sticky dot
- Sticky note, 3x3"
- Sticky note, 4x6"
- Tape, transparent
- Brick, 8x4x2.25"
- Calculator
- Chart paper
- Glue
- Highlighter

- Marker, black
- Marker, dry erase, thin/fine point, black
- Markers, colored, set of 4 colors
- Meter stick
- Paper towels, roll
- Pencils, colored
- Scissors
- Sheet protector, 8.5x5.5" (half sheet size)
- Sheet protector, 8.5x11"
- Sheet protector, 11x17"
- Small ice chest or ziplock baggie with ice or freezer close by
- Water
- [Copies of Lesson 11 Assessment](#)
- [Copies of Lesson 13 Assessment](#)
- [Copies of Lesson 14 Assessment](#)

Unit 5: Natural Hazards

Topic Narrative from [OpenSciEd](#)

Driving Question: Where do natural hazards happen and how do we prepare for them?

Topic	Achieving Grade Level (AT)
<p>When collecting evidence related to these targets, it will be recorded in this topic in Infinite Campus.</p>	<p>The Level 3 Targets are the grade-level expectations for students in all classes. <i>Success Criteria</i> are provided below each target.</p>
<p>Natural Hazards 4 Weeks 3/04 - 4/12</p>	<p>LT5A- Construct an explanation that predicts which communities are most at risk for damage because of a sudden change. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Investigate data, videos, simulations, and models to communicate where and when natural disasters occur. Addressed: Lessons 1, 2, 3 and 4 <input type="checkbox"/> Investigate data, videos, simulations, and models to describe how natural hazards move. Addressed: Lessons 1, 2, 3 and 4 <input type="checkbox"/> Use historical data on natural hazards to interpret general patterns of risk for different locations. Addressed: Lessons 1, 2, 3 and 4 <p>LT5B- Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Define the problem. Addressed: Lessons 5 <input type="checkbox"/> Identify criteria and constraints of the problem, communities and stakeholder groups. Addressed: Lessons 5, 6 and 7 <input type="checkbox"/> Evaluate structure design solutions to determine how well they meet the criteria and constraints. Addressed: Lessons 5 and 7 <p>LT5C- Develop a communication plan for a hazard to prepare a community. Learning that shows evidence of progressing towards grade-level learning target (success criteria):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assess the hazard risk. Addressed: Lessons 9 and 10 <input type="checkbox"/> Identify critical information about how hazards form, move and impact communities. Addressed: Lessons 1, 2, 3, 4, 8, 9, and 10 <input type="checkbox"/> Identify methods to detect, warn communities, and reduce damage. Addressed: Lessons 7, 9 and 10 <input type="checkbox"/> Describe how communities can prepare for, respond during, and recover after a hazard. Addressed: Lessons 7, 9 and 10

Resources

[Teams Folder](#)

Need more help? Check out the [Unit Webinar](#) for Teachers

LT5A

Assessment Opportunities

- Lesson 2:** Consensus Discussion
- Lesson 3:** Monitor discussions
- Lesson 4:** Explaining and Forecasting Tsunami Risk

LT5B

Assessment Opportunities

- Lesson 5:** Scientist Circle Discussion
- Lesson 7:** Part 3 of Community Stakeholders
- Lesson 7:** Formatively Assess the Evaluation Matrix

LT5C

Assessment Opportunities

- Lesson 10:** Assessing Hazard Risk
- Lesson 10:** Determining Stakeholders Needs
- Lesson 10:** Hazard Communication Planning

Consumable and locally sourced materials

[Review full list of materials here](#)

- Index card, 3x5"
- Index card, 5x8"
- Sticky dot
- Sticky note, 3x3"
- Sticky note, large, 6x4"
- Tape, transparent
- Chart paper
- Marker, black
- Marker, dry-erase
- Markers, colored (set)
- Pencil, colored
- World map
- [Copies of Lesson 4 Assessment – Explaining and Forecasting Tsunami Risk](#)
- [Copies of Lesson 10 Assessment – Assessing Hazard Risk](#)

Unit 6: Cells & Systems

Unit Narrative from [OpenSciEd](#)

Driving Question: How do living things heal?

Topic	Achieving Grade Level (AT)
<p>When collecting evidence related to these targets, it will be recorded in this topic in Infinite Campus.</p>	<p>The Level 3 Targets are the grade level expectation for students in all classes. Success Criteria are provided below each target.</p>
<p>Cells & Systems 6 weeks 4/15 – 5/24</p>	<p>LT6A- Plan an investigation to provide evidence that not all things are made of cells. Learning that shows evidence of progressing towards grade-level learning target:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Investigate and collect information on the microscopic structures of living things. Addressed: Lessons 4, 5, 6, 7 <input type="checkbox"/> Identify patterns in the microscopic structures of living things. Addressed: Lessons 5, 6, and 7 <input type="checkbox"/> Compare and contrast structures in unicellular and multicellular organisms. Addressed: Lessons 2, 3, 4, 5, 8, 9 and 10 <input type="checkbox"/> Construct an argument using evidence from the microscopic scale that all things are not made of cells. Addressed: Lessons 4, 5, 6 and 7 <p>LT6B- Describe the function of a cell and ways parts of cells contribute to the function using models. Learning that shows evidence of progressing towards grade-level learning target:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify patterns in the microscopic structures of living things. Addressed: Lessons 3, 4, 5,6, and 7 <input type="checkbox"/> Analyze data on microscopic structures of skin, bone, and muscle. Addressed: Lessons 3, 4, 5, 6, and 7 <input type="checkbox"/> Describe the healing process using models. Addressed: Lessons 5, 8, and 12 <input type="checkbox"/> Construct an explanation to show that the structure of cell membranes and cell walls (tiny openings) let certain things in and out of cells (function). Addressed: Lesson 11 <p>LT6C- Construct and argument using evidence for how the body is a system of interacting subsystems composed of groups of cells. Learning that shows evidence of progressing towards grade-level learning target:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Obtain information about the structure and function and interactions between and within systems in the human body. Addressed: Lessons 5, 8, 9, and 10 <input type="checkbox"/> Construct an explanation for how systems of the body interact to support the healing process. Addressed: Lessons 10 and 12 <input type="checkbox"/> Describe that single-celled organisms grow and split in similar ways to animal cells. Addressed: Lesson 10 <input type="checkbox"/> Construct an explanation for how growth is happening at the bones in growth plates. Addressed: Lesson 13

Resources

[Teams Folder](#)

Need more help? Check out the [Unit Webinar](#) for Teachers

LT6A	LT6B	LT6C
<p>Assessment Opportunities</p> <p>Lesson 1 and 2: Healing Initial Model Lesson 5: Obtaining Information from Scientific Texts Lesson 6: Progress Tracker Lesson 7: Two-Part Assessment</p>	<p>Assessment Opportunities</p> <p>Lesson 1 and 2: Healing Initial Model Lesson 3: Close-Up Diagrams of Skin, Muscle and Bone Lesson 4: Final Question on Guidance for Reading about Blood Lesson 6: Progress Tracker Lesson 7: Two-Part Assessment Lesson 11: Question 4 on Data from Investigating Red Onion Cells</p>	<p>Assessment Opportunities</p> <p>Lesson 8: Initial Model Lesson 10: Exit Ticket Lesson 12: How do systems in the body interact during the healing process? Lesson 13: Summative Assessment</p>

Consumable and locally sourced materials

[Review full list of materials here](#)

- Tape, transparent
- Paperclip, small
- Sticky note, 6x8"
- Sticky note, 3x3"
- Coverslip, glass or plastic
- Salt
- Toothpick
- Paper towel
- Paper, mm graph, 2 cm x 4 cm piece
- Timer
- Whistle or noise making device
- Pencil or pen
- Marker, permanent, black
- Onion, red, fresh
- Water, distilled
- Highlighter
- Chart paper
- Markers, dark color
- [Copies of Lesson 7 Assessment](#)
- [Copies of Lesson 10 Exit Ticket](#)
- [Copies of Lesson 12 Assessment](#)
- [Copies of Lesson 13 Summative](#)