

FORMATIVE ASSESSMENT

HIGH-IMPACT INSTRUCTIONAL STRATEGIES

I CAN...THIS MEANS

Clear learning targets are foundational for all aspects of teaching and learning. "I can...This means..." statements can be developed by deconstructing a standard, IEP goal, behavioral goal, etc. It is critical that the learning targets are written in student-friendly and age-appropriate language.

LEARNING PROGRESSIONSS

Once the learning goal has been deconstructed and converted into student-friendly language, the statements can then be arranged into a learning progression that helps students see the continuum of learning.

The continuum also provides teachers with the necessary information to plan efficient, targeted instruction.

CONCEPT MAPS

Concept mapping is a high-impact strategy that may be used for both teacher clarity and formative assessment. The greatest impact occurs when students develop a concept map, and return to it frequently to add new information, build new connections, and add vocabulary.

NEXT-STEP RUBRICS

Next-step rubrics are designed to help students self-assess and set goals related to the learning outcome(s). These rubrics allow for great flexibility, providing students with varying levels of scaffolding. With the student at the center of the process, learners are able to develop metacognitive strategies to improve learning.

MODELS OF STRONG & WEAK WORK

Using models of strong and weak work further clarify the learning expectations, and help students think critically about their own work and the work of others as it relates to the success criteria. When students analyze work samples, and improve weak models, they gain a better understanding of how to assess their own work.

FEEDBACK

Providing students with regular, descriptive feedback is critical to student achievement. Effective feedback is based on success criteria and answers three questions for the learner:

1. Where am I going?
2. What progress have I made toward that goal?
3. What are my next steps?

AFL & iObservation

Design Question 1: Communicating Learning Goals & Feedback

- *Element 1: Providing Rigorous Learning Goals & Scales*

Desired Effect: Students understand the learning goal and what the scale means.

AFL:

- "I can...This means"
- Learning Progressions
- Concept Mapping
 - Generated by the teacher to help clarify learning goal for students
 - Generated by students to show understanding of the learning goal
- Models of Strong & Weak Work

Student Evidence	Teacher Evidence	Marzano Links
<ul style="list-style-type: none"> * Students are able to articulate the learning goal and describe the steps in the scale in their own words * Students are able to create a personal learning goal that is directly related to the teacher-identified goal * Students may add visual representations or diagrams to the scale to further clarify their understanding of the learning goal * Students are able to describe how one step of the learning scale (progression) is related to other steps * Students monitor for their own understanding of the learning goal or scale and ask clarifying questions * Students are able to articulate how the activity or lesson is related to the learning goal and scale * Students may have different representations of the scales that have been developed by or with the teacher 	<ul style="list-style-type: none"> * Teacher asks students to restate the learning goal and performance scale (progression) * Teacher listens as students restate goals to one another * Teacher uses strong models of work to show expectations at each level of performance * Teacher uses worked weak models to help students understand how to improve their level of performance * Teacher works with individual students to make connections between student interests and learning goals * Teacher is monitoring all students for understanding of each level and clarifies steps for students * Teacher gives students opportunities to talk with one another about how the activity or lesson is related to the learning goal and scale * Learning goals and scales are designed to meet the needs of all learners 	<p><u>Scale</u></p> <p><u>Techniques</u></p> <p><u>Key Criteria</u></p> <p><u>Monitoring</u></p> <p><u>Adaptations</u></p>

Design Question 1: Communicating Learning Goals & Feedback

- *Element 2: Tracking Student Progress*

Desired Effect: Students understand their current status on the scale and can articulate their progress toward the learning goal.

AFL:

- Learning Progressions
 - Generated by students, used as a formative assessment
 - Generated by teacher to provide a visual representation of different levels of the scale
- Next Step Rubrics
- Hinge Questions
- Regular, Descriptive Feedback
- Self-Assessment & Goal Setting

Student Evidence	Teacher Evidence	Marzano Links
<ul style="list-style-type: none">* Students can articulate their status on the learning progression and describe their progress toward the goal* Students have a progression that is regularly and systematically updated* Students can provide specific examples of evidence related to their progress* Students are able to use their progressions and formative assessment data to set goals* Students are aware of how to demonstrate their proficiency in different ways* Students show an understanding of levels of proficiency as they self-assess their level of mastery	<ul style="list-style-type: none">* Formative assessments are used to help students track their progress toward the learning goal* Learning progressions are differentiated to meet the needs of all learners* All students are monitored for their understanding of their current status on the scale and progress toward the goal* The teacher has a system and plan for when and how to have students update their progress* Teacher provides students with specific and actionable feedback during the learning process that is directly linked to the learning goal* Teacher provides examples of assessment types that can be used to demonstrate proficiency at each level* Teacher provides students with a next-step rubric that illustrates how to move to the next level	<ul style="list-style-type: none"><u>Scale</u><u>Techniques</u><u>Key Criteria</u><u>Monitoring</u><u>Adaptations</u><u>Formative Assessments</u>

“I Can...This means” Design Guide

- 1.) Choose a learning outcome (standard, skill, or goal) you want students to work on.
 - These may come from CCSS, NGSS, IEPs, behavior plans, etc.
- 2.) Deconstruct the learning outcome to develop a list of smaller, more explicit learning targets, or “I can...This means” statements
 - a.) Determine any vocabulary or language that students need to know, and write the definitions in student-friendly language.
 - b.) Think about what the learning outcome requires students to know and be able to do. Make a list. You may include some or all of the following target types:
 - Knowledge: factual information, procedural knowledge, or conceptual understanding, generally within specific content areas
 - Reasoning: thought processes students need to learn and do well within a range of subjects
 - Skill: demonstration or physical skill-based learning
 - Product: an artifact or creation of a product
 - Disposition: attitudes, motivations, and interests that affect students’ approaches to learning
 - c.) Using your list, write each of the things students need to be able to do in student-friendly “I can” or “I am learning to” statements.
 - d.) Put the statements in order of how you will teach them.
- 3.) Determine how you will share the statements with students.

Forms for developing these statements can be found [here](#).

Learning Progression Design Guide

- 1.) Choose a learning outcome (standard, skill, or goal) you want students to work on. Complete the “I can...This means” statements. For more information on creating them, please see the corresponding design guide.
- 2.) Put the “I can...This means” statements in order of how you will teach them, or how students typically learn them.
- 3.) Determine the tool you will use to share the learning progression with students.
 - Stars and Stairs
 - Puzzles
 - Whole class bulletin board
 - Make up your own tool
- 4.) Develop a learning progression to share with students.
 - Considerations:
 - How will you account for students who exceed the standard? You may want to add more steps for extension work
 - Keep in mind that adding the numbers 1-4 on a progression can encourage students to focus on a score, rather than their learning. While you may plan for your progression to correlate with a summative score, it is recommended that you **do not** add evaluative scores to documents used by students.
 - Is the progression in student-friendly language and easily understood by students?
 - Does the progression follow a logical order and are all steps linked to a larger idea? Are there any steps that seem out of place or not to fit with the main focus of your progression?
 - How will you get feedback on your progression? Could you gather input from students or peers?
- 5.) Monitor student understanding and awareness of the intended learning.
- 6.) Use strong and weak models to clarify expectations of quality.

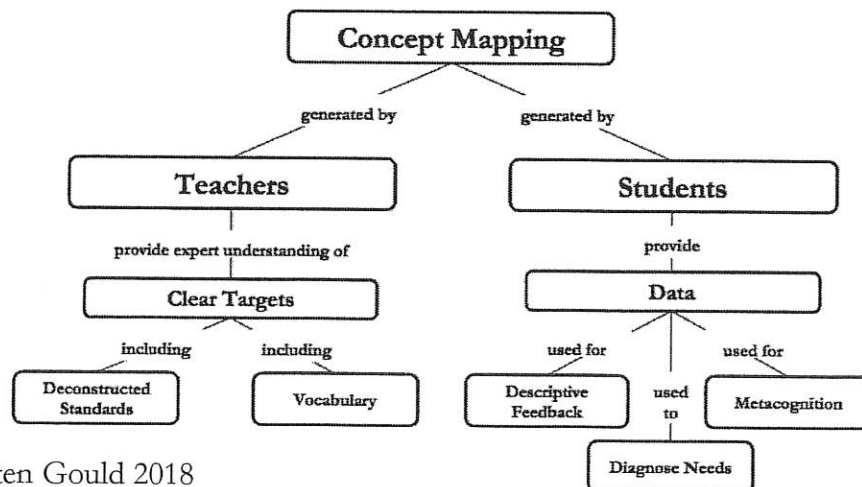
Templates for learning progressions and finished progressions can be found [here](#).

Concept Mapping Guide: *Clear Targets*

Teacher-generated concept maps provide students with another way to access the learning targets and see connections among ideas and concepts.

- 1.) Choose a learning outcome (standard, skill, or goal) you want students to work on.
 - These may come from CCSS, NGSS, IEPs, behavior plans, etc.
 - Record the goal in the box below.

- 2.) Circle the **most important** word or phrase in the box above.
- 3.) Underline other important words or phrases.
- 4.) Write each of the words/phrases you underlined or circled on an index card. *Using index cards or post-it notes will allow you to move around the ideas until you've found a flow that makes sense. If you would rather sketch it or use a concept mapping tool, that will work well, too.*
- 5.) The word or phrase you circled will go at the **top** of your concept map. *When designing a concept map, the big idea is always at the top, with subsequent ideas/concepts underneath.*
- 6.) Arrange your other words/phrases under your big idea using the following guidelines:
 - a.) Your concepts should be arranged according to hierarchy;
 - b.) Put words/phrases inside a box;
 - c.) Add lines to show how ideas/concepts connect;
 - d.) Add linking verbs, prepositions or prepositional phrases to show connections.



Concept Mapping Guide: *Formative Assessment*

Student-generated concept maps help students to consolidate ideas and build connections, allowing learners to move to a deeper level of understanding. As students create their concept maps, teachers are able to formatively assess students on their knowledge and conceptual understanding, and provide timely, focused feedback.

Uses for Students:

- Build surface-level knowledge
- Consolidate surface-level knowledge and deepen understanding
- Explore connections between ideas & concepts
- Build vocabulary
- Share ideas efficiently
- Self-assess & set goals

Uses for Teachers:

- Formative assessment
- Focused, descriptive feedback

Try This!

- 1.) At the beginning of a unit, have students generate a concept map using what they already know about the topic. Throughout your unit, offer students time to update their concept maps, adding new ideas. Each time students update their map, have them use a different color. This allows them to see how their learning has increased throughout the unit!
- 2.) Concept mapping is a great way for students to work on reading comprehension. A great place to start is to have students make a concept map of the characters in a story!

Tips:

- 1.) Concept mapping is likely a new strategy for your students. Take time to explain and *explicitly* teach the process.
- 2.) Brainstorm language, ideas, and concepts as a whole group at first. Doing so provides a scaffold for students, while still challenging them to arrange and connect the ideas.
- 3.) Allow students to use index cards, post-it notes or other manipulatives to generate a concept-map.
- 4.) Using an app like Seesaw, Book Creator or other software allows students to move ideas around, change the size, etc.



10 EFFECTIVE WAYS TO USE



Concept Maps

UNIT GUIDE

Are you integrating a variety of content areas? Using a concept map will help students understand how the project all comes together.

CLARIFY TARGETS

Help students understand where they're headed by providing a concept map of the standard or goal.

DIAGNOSE NEEDS

When students generate concept maps, they provide valuable information about the connections students are (or are not) making related to the content.

FEEDBACK

Use the concept map as an opportunity to talk with students about where they are in the learning process and what their next steps might be.

SELF-ASSESSMENT

Have students self-assess and set goals using a concept map of a learning target. Have them put a star next to what they're doing well and stars next to something they need to work on.

BUILD ON LEARNING

At the beginning of a unit, have students draw a concept map showing what they know. Each time they add on, they use a different color to show their growth!

VOCABULARY

Concept maps are a great tool for helping students learn and categorize vocabulary. Multiple meaning words can also be mapped.

COMPREHENSION

Students can use concept maps to organize thinking about the sequence and events of a story or the character development.

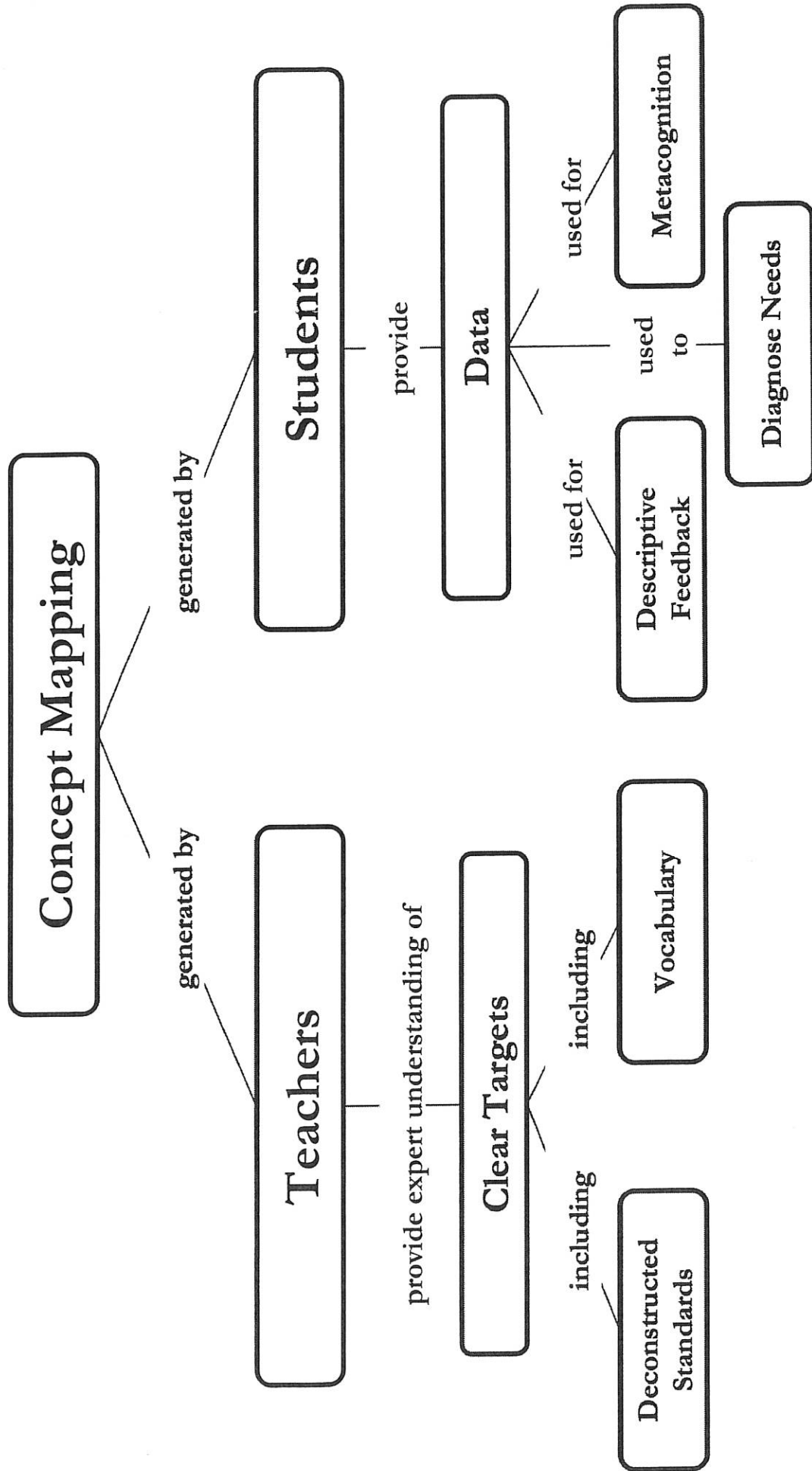
WRITING

When we give students the opportunity to map out their writing, ideas are more developed and organized.

SCIENCE

The NGSS are comprised of three dimensions. Concept mapping can help both teachers and students better understand how the three dimensions are related.

What will you try?




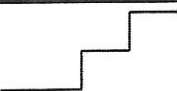
Guide to Using Weak Worked Examples

- 1.) Choose a learning outcome (standard, skill, or goal) you want students to work on.
- 2.) Develop scoring criteria that you will share with students. This can be in the form of a rubric, learning progression, next-step rubric, or another format.
- 3.) Use your scoring criteria as a guide to think about where students often make mistakes related to the learning outcome.
 - Develop or find a model that illustrates an example of weak work related to the scoring criteria you've established..
- 4.) Using the scoring criteria that you shared with students, analyze the piece of work together or in small groups.
 - What parts did the writer do well?
 - What is the work missing?
 - What could be improved?
 - Link all suggestions and ideas back to the scoring criteria. Get students accustomed to evaluating their work based on the criteria.

Next-Step Rubrics Design Guide

- 1.) Choose a learning outcome (standard, skill, or goal) you want students to work on. Complete the “I can...This means” statements. For more information on creating them, please see the corresponding design guide.
- 2.) Put the “I can...This means” statements in the middle column, under “Success Criteria”
- 3.) Considerations:
 - Scaffolding
 - Put success criteria in each of the columns, students put check marks in the boxes rather than writing in the “Done Well” and “Next Step” columns
 - Allow advanced students to write in their next steps and have them include a plan for what they will do to improve and when
- 4.) Uses
 - Self reflection & goal Setting
 - Peer to peer feedback and goal setting
 - Teacher to student feedback and goal setting
 - Analyzing strong and weak work

Templates for next-step rubrics can be found [here](#).

Done Well 	Success Criteria	Next Steps 
	<i>I can...</i> (standard written in student-friendly language) <i>This means...</i> (broken down into daily learning targets)	

Hinge Question Design Guide

- ❖ Determine the point at which you will assess students using the hinge question.
 - *Hinge questions are most commonly used at a point of instruction where the teacher must determine next-steps for whole group, small group, or individual learning.*
- ❖ Determine the question that you will ask students.
 - *Focus on the critical aspects of learning, rather than those that are not required for further learning.*
- ❖ Determine common errors, misconceptions, flaws in reasoning, or partial understandings.
 - *Knowing these will allow you to craft effective distractors.*
- ❖ Craft your response choices.
 - *Use strong distractors, each with diagnostic ability. Each answer should give you information about the needs of the learner.*
 - Ideally, it is impossible for a student to reach the correct answer by using an incorrect thought process.
 - Each response follows only one thought process.
If a student chooses B, they could only have arrived at that answer by following one rule, or thought process.
 - There is only one response for each rule.
A student cannot arrive at more than one answer using the same thought process.
- ❖ Use the data.
 - If students have mastered the target, you may move on.
 - If students have not, you may:
 - Reteach the lesson
 - If reteaching is necessary, consider changing the teaching method you've used. Research says using the same method repeatedly is likely to confirm in students' minds that they are not capable of success.
 - Form small groups using the data collected and provide focused practice

ELA Hinge Question Item Formulas

Infer: *Which idea could you infer from the text?*

- **Right answer-** A guess based on evidence found in the passage
- **Distractor-** A guess that includes a word or concept from the passage but is not supported by the meaning of the passage?
- **Distractor-** A guess that might seem reasonable but for which there is no evidence in the passage

Summarize: *Which sentence best summarizes what this passage is about?*

- **Right answer-** A statement of the main ideas of the passage
- **Distractor-** A statement of one main idea not sufficiently broad enough to represent the whole passage
- **Distractor-** A statement including an idea not found in the passage
- **Distractor-** A statement of one fact or detail from the passage

Generalize: *Which generalization can you support after reading the passage?*

- **Right answer-** A statement that is true for the evidence presented and extends the application logically to a broader array of instances
- **Distractor-** A statement that is true for the evidence presented but the application covers too broad an array of instances to be supported by the evidence
- **Distractor-** A statement that is true for the evidence presented but does not include an extension to other instances
- **Distractor-** A statement that is not true for the evidence presented

Identify Cause & Effect: *Which sentence best explains why (event or action) happened?*

- **Right answer-** A plausible statement of causation based on evidence from the text
- **Distractor-** A statement of causation that is not supported by evidence in the text
- **Distractor-** A statement that offers another effect rather than a cause.

Learning Progression Implementation Guide

Preliminary Decisions

<p>What assignments, quizzes, projects and/or test information will you use <u>formatively</u>? <i>This work guides your instruction to support students as they prepare for the summative assessment.</i></p>	<p>Power of Formative Assessment:</p> <ul style="list-style-type: none"> • Diagnostic • Feedback • Self-Assessment & Goal-Setting
<p>What assignment, project, quiz, and/or test information will you use <u>summatively</u>? <i>A rubric should be provided to students prior to administering this assessment.</i></p>	<p>Examples of Formative Assessment:</p> <ul style="list-style-type: none"> • Classroom Discussions & Strategic Questioning • <u>Hinge Questions</u> • Student Work <ul style="list-style-type: none"> ◦ quizzes, homework, etc. • Exit Slips • Classroom Polls • Games: Jeopardy, Kahoot, etc. • Seesaw: <p><i>This is also a great tool to give parents a “window” into the classroom!</i></p> <ul style="list-style-type: none"> ◦ Videos ◦ Photos ◦ Recordings ◦ Graphic Organizers • Concept Mapping & Visual Representations • Intrigue Journals • Misconception Check • <u>More ideas here!</u>
<p>Gathering Evidence</p>	<p><i>What system will you put in place to help students gather and share evidence related to their progress?</i></p> <ul style="list-style-type: none"> • Digital Portfolio • Binder or Notebook

Implementation with Students	
Introduction of Progression	<i>How will you introduce the progression to students?</i>
Pre-Assessment	<i>How will you pre-assess students?</i> <i>How will that data be reflected in your instructional planning and in their progressions?</i>
Reflecting On Progress How: When:	<i>What systematic approach will you take to help students <u>regularly</u> reflect on their progress?</i>
Updating Progress How: When:	<i>What <u>systematic</u> approach will you take to help students <u>regularly</u> update their progress?</i>
Sharing Progress How: When:	<i>How will students share their progress with others?</i>

Next Steps	
Progression Refinement	<p><i>How will you gather feedback to refine your progression?</i></p> <ul style="list-style-type: none"> • Students • Parents • Colleagues
Visual Representation	<p><i>How could you visually represent the learning goals for students?</i></p> <ul style="list-style-type: none"> • Concept Map
Helping Students Self-Assess	<p><i>How will you help students self-assess?</i></p> <ul style="list-style-type: none"> • Strong & Weak Work • Effective Feedback • Peer Conferences
Helping Students Set Goals	<p><i>How will you help students set goals?</i></p> <ul style="list-style-type: none"> • Next-Step Rubric • Feedback

First, the teacher breaks the standard into incremental steps.

NGSS Performance Indicator: 1-PS4-3: Plan and conduct investigations to determine the effects of placing different materials in the path of light.

Disciplinary Core Idea:
Some materials allow light to pass through them, others allow only some light through and others block all the light and create a dark shadow on any surface beyond them, where the light cannot reach. Mirrors can be used to redirect a light beam.

Cross-Cutting Concept:

Simple tests can be designed to gather evidence to support or refute student ideas about causes.
(1-PS4-1),(1-PS4-2),(1-PS4-3)

Science & Engineering Practices:

Plan and conduct investigations collaboratively to produce evidence to answer a question.
(1-PS4-1),(1-PS4-3)

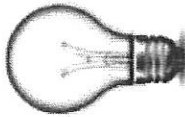
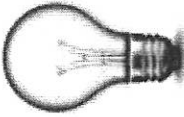
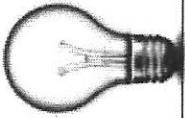
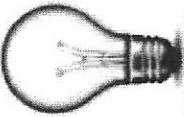
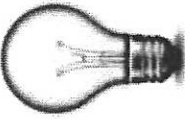
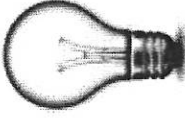
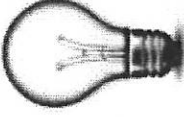
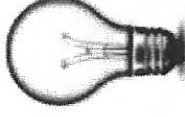
I can plan and do an investigation to find out what happens when we put different materials in the path of light.

This means:

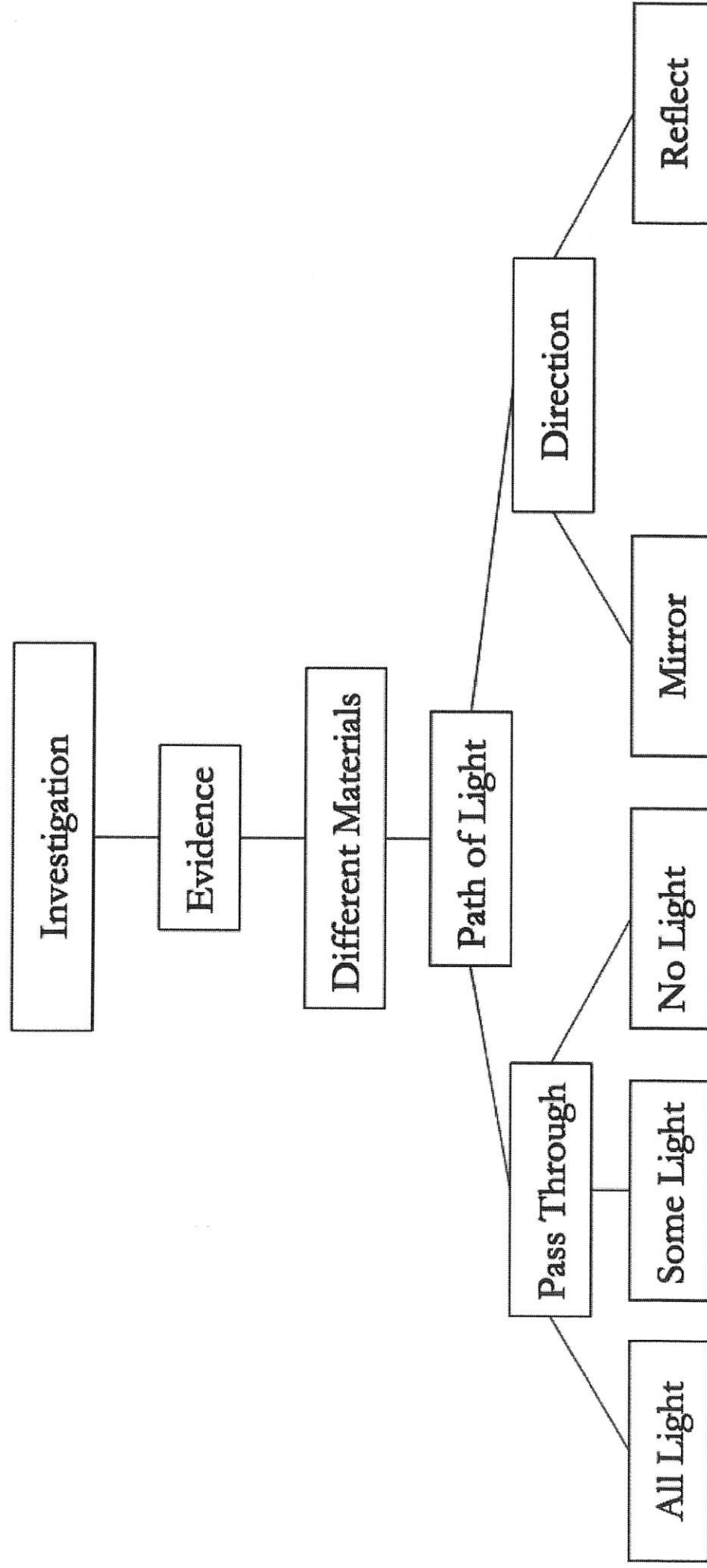
- I can work with my peers to plan an investigation that answers a question.
- I can follow my investigation plan to answer my question.
- I can use materials to decide what things allow *all* light to pass through.
- I can use materials to decide what things allow *some* light to pass through.
- I can use materials to decide what things allow *no* light to pass through.
- I can tell about how a shadow is made.
- I can use a mirror to change the direction of light.
- I can use evidence to talk about what happens when I put different materials in the path of light.

Next, the teacher places those steps into a progression for students to track their progress, self-reflect, and set goals.

PS4-3: I can plan and do an investigation to find out what happens when we put different materials in the path of light.

	I can work with my peers to plan an investigation.	Date: Evidence:
	I can follow my plan to find evidence to answer my question.	Date: Evidence:
	I can use materials to learn what things allow <i>all</i> light to pass through. transparent	Date: Evidence:
	I can use materials to learn what things allow <i>some</i> light to pass through. translucent	Date: Evidence:
	I can use materials to learn what things allow <i>no</i> light to pass through. opaque	Date: Evidence:
	I can tell about how a shadow is made.	Date: Evidence:
	I can use a mirror to change the direction of light. reflect	Date: Evidence:
	I can use evidence to talk about what happens when I put different materials in the path of light.	Date: Evidence:

The teacher may also provide students with a concept map, visually representing their learning goal. For younger students, images are frequently used.

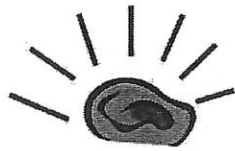




My eyes are on the speaker.



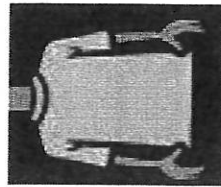
My mouth is quiet.



I am listening with both ears.



My hands are quiet.



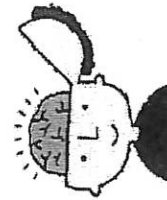
My body is facing the speaker.



My feet are quiet.














I care about what is being said.





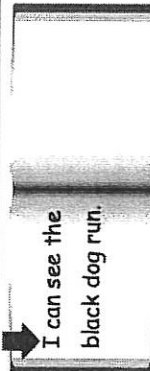

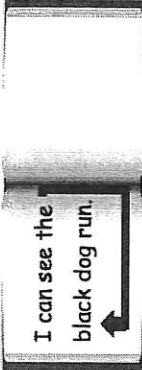






I am thinking about what is being said.

I can listen with my whole body!

Printed Language Concepts: Words, Letters & Sounds

I can point to a letter.	I see a cat .	
I can point to a word.	I see a cat .	
I can tell the sound a word begins with.	 cat ↑	
I can tell the sound a word ends with.	cat ↑ 	
I can tell the sound each letter makes.	<div> Ss  </div> <div> Tt  </div> <div> Uu  </div> <div> Vv  </div>	

Printed Language Concepts: 1-1 Correspondence & Directionality

I can point to each word as I read it.		
I know where to start reading.		
I know where to go when I get to the end of a line of text.		
* I can identify a period, question mark, and exclamation point.	  	
* I can tell what a period, question mark, and exclamation point are used for.		

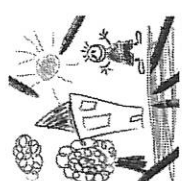
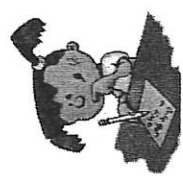
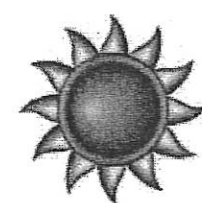

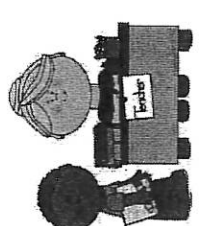

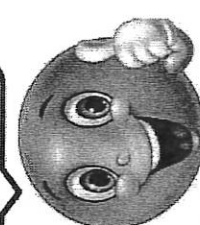
1.RL.4 I can identify words, phrases, or lines that appeal to the senses.

Figurative Language	
<p>I can identify when an author uses onomatopoeia.</p> <p>BUZZZ</p>	<p>I can identify when an author uses a simile.</p> <p>She is as beautiful as a rose.</p>
<p>I can identify when an author uses a metaphor.</p> <p>The clouds are cotton balls in the sky.</p>	<p>I can identify when an author uses personification.</p> <p>The wind whistled all night long.</p>

<p>I can identify figurative language.</p>	<p>I can tell what an author means when reading figurative language.</p>	<p>I can explain what it means to appeal to the senses.</p>	<p>I can identify words, phrases, or lines that appeal to the senses.</p>	<p>I can tell which sense an author is appealing to, and give evidence for how I know.</p>
Date: Evidence:	Date: Evidence:	Date: Evidence:	Date: Evidence:	Date: Evidence:

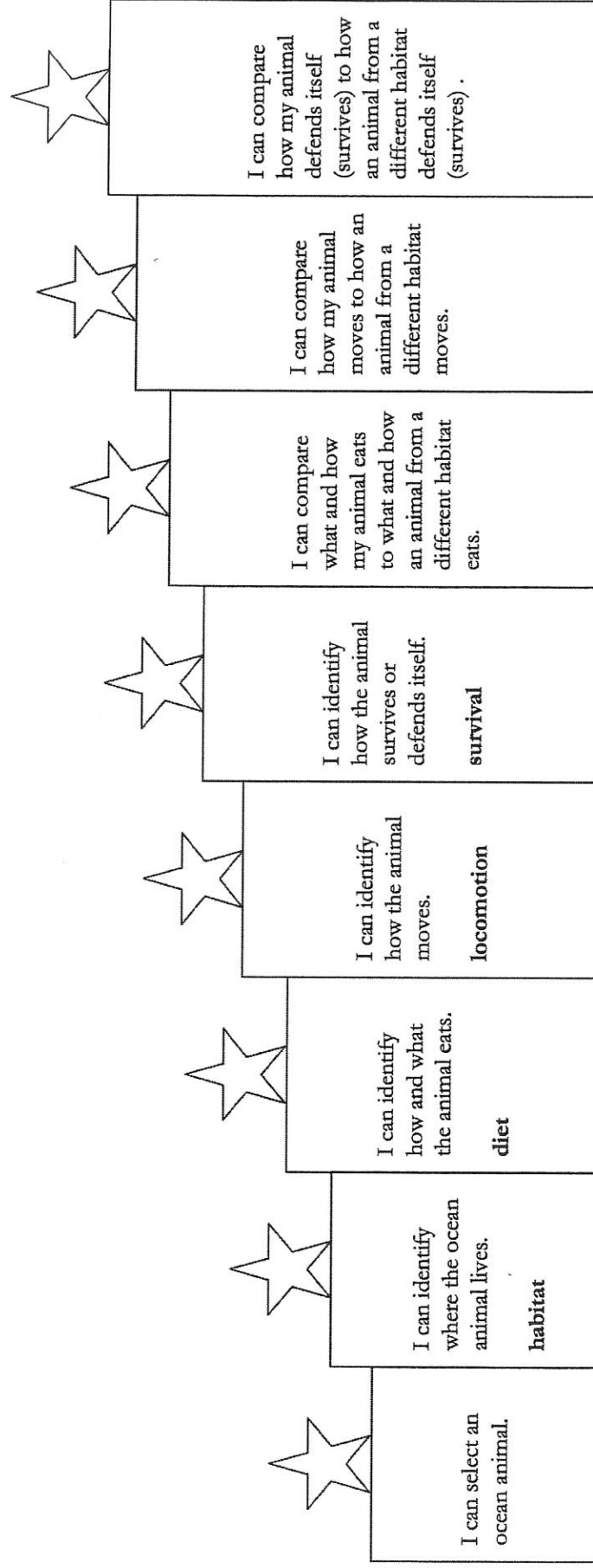
1.W.5 I can write and draw about 1 topic.

I can use feedback from my teacher and friends to make my writing better.

<div>★</div> <p>I can draw about 1 topic.</p> 	<p>Date: Evidence:</p>
<div>★</div> <p>I can write about 1 topic.</p> 	<p>Date: Evidence:</p>
<div>★</div> <p>My writing and drawings match.</p>  <p>It is a sun.</p>	<p>Date: Evidence:</p>
<div>★</div> <p>I can answer questions about my writing.</p> 	<p>Date: Evidence:</p>
<div>★</div> <p>I can use feedback from my teacher to make my writing better.</p> 	<p>Date: Evidence:</p>
<div>★</div> <p>I can use feedback from my friends to make my writing better..</p> 	<p>Date: Evidence:</p>
<div>★</div> <p>I can explain how I used feedback to make my writing better.</p> <p>Look how I made it better!</p> 	<p>Date: Evidence:</p>

Name: _____

2-LS4-1: I can make observations of ocean animals to compare the diversity of life in different habitats.



2.RF.4 I can read books in a way that helps me understand what I am reading.

<p>I can know what books fit each purpose:</p> <ul style="list-style-type: none"> - inform - entertain - persuade 	<p>I can make book choices that match my purpose for reading.</p>
<p>I can explain how a book I'm reading matches my purpose. *</p>	<p>I can show that I understand what I am reading by writing or talking about the text.</p>

I can tell the purpose for reading a specific book.

I can show that I understand what I am reading.

<p>I can read most of the words correctly.</p>	<p>I can read in longer phrases, instead of word-by-word.</p>
<p>I can read in a way that shows that I pay attention to punctuation in the text.</p>	<p>I can reread the text to improve my fluency and expression.</p>

I can read the words correctly, fluently, and with expression.


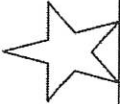
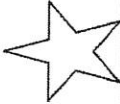
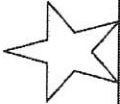

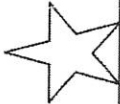
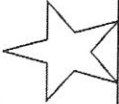
<p>I can tell when I do not understand what I'm reading.</p>	<p>I can tell when a word I read doesn't make sense.</p>
<p>I can reread when I notice I do not understand the text.</p>	<p>When I notice a word I say doesn't make sense, I can reread to fix my mistake.</p>

I can monitor my understanding of the text and fix mistakes that I make when I read.

Name:

Standard: Eco.14



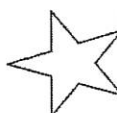
Describe why people in one country trade goods and services with people in other countries.

	I can explain/show what goods are.	Date:	Evidence:
	I can explain/show what services are.	Date:	Evidence:
	I can give examples of goods from other countries.	Date:	Evidence:
	I can give examples of services from other countries.	Date:	Evidence:
	I can explain why people from one country would want or need goods from another country.	Date:	Evidence:
	I can explain why people from one country would want or need services from another country.	Date:	Evidence:
	I can explain why trading goods and services would be helpful to both countries.	Date:	Evidence:

3.OA.2





I can explain how division works, and identify what numbers in a division problem represent.

I know what the numbers in a division problem represent.	I know a dividend is the number of items to be shared equally.
I know a divisor is the number of equal shares or the number in each equal share.	I know a quotient is an answer to a division problem.

		
Given a division problem, I can describe a situation where it could apply in real life.	Given a situation, I can write a division equation that represents it and show how to solve it with manipulatives or pictures.	I understand how division and multiplication are connected. I can represent a multiplication problem as a division equation.
Exceeds Expectations		

5.RL.5: I can use accurate quotes from a text when explaining what the text says explicitly and when drawing inferences from a text.

I know that a quote is a word, phrase, sentence or paragraph that is taken directly from the text.	I know that text evidence is a specific part of the text that supports what I say about what I read.
I know that explicit information is stated directly in the text.	I know that an inference can be made by using text clues, but it is not explicitly stated in the text.

	I can identify what the text says explicitly and what is inferred from the text.	Date: Evidence:
	I can summarize what the text says, citing text evidence to support my thinking.	Date: Evidence:
	I can draw inferences from a text, citing text evidence to support my thinking.	Date: Evidence:
	I can justify my choice of a quote and describe how it supports my explanation of the text.	Date: Evidence:

3.RI.5

I can use text features and search tools to efficiently locate information on a topic.

I can identify text features and search tools:

- ☐ sidebar & text box
- ☐ hyperlink
- ☐ key word
- ☐ diagram & illustration
- ☐ graphic organizer (venn diagram)
- ☐ glossary
- ☐ index
- ☐ appendix
- ☐ chart & graph
- ☐ timeline
- ☐ map
- ☐ schedule
- ☐ caption
- ☐ heading & subheading
- ☐ various typeface

I can explain the **purpose** of each text feature and search tool.



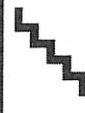
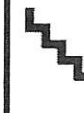
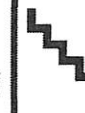
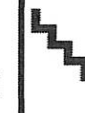


I can use **key words** and their **synonyms** to quickly find information.

I can choose the **best** text feature or search tool to complete a task **efficiently**.

I can explore how the author's use of text features and search tools **support** the main idea of the text.

Extension

Accuracy Challenge

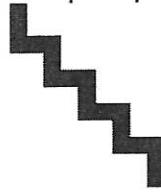
I can read without skipping words.	★	
I can read without saying words that are not in the text.	★	
I can read words with prefixes. <u>re</u> play	★	
I can read words with suffixes. play <u>ful</u>	★	
I can monitor my reading to make sure the words I read look right.	★	
I can monitor my reading to make sure the words I read sound right.	★	
I can monitor my reading to make sure the words I read make sense .	★	
I can use strategies to read words I don't know.	★	

Name _____

<p>I can correctly read words with affixes.</p> <ul style="list-style-type: none"> • prefixes • suffixes 	<p>I can read without:</p> <ul style="list-style-type: none"> • skipping words • saying words that are not in the text
<p>I can monitor my reading to be sure the words I read:</p> <ul style="list-style-type: none"> • look right • sound right • make sense 	<p>I can use strategies to help me read words I don't know.</p>

Self-Assessment & Goal Setting





Teacher Feedback:

Fiction

I can write a summary of a text.

Knowledge Targets

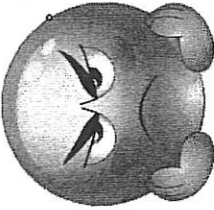



I can tell the difference between major and minor events in the text.	I can identify important vocabulary in the text.
I can identify important characters in the text.	I can identify details about important characters in the text.





Product Targets

I can write a summary that includes: <ul style="list-style-type: none"> • Ideas from the text in my own words. paraphrase	I can write a summary that includes: <ul style="list-style-type: none"> • All of the important characters' names; • Some details about important characters.
I can write a summary that includes: <ul style="list-style-type: none"> • All important events in the correct sequence. 	I can write a summary that includes: <ul style="list-style-type: none"> • Details about important events in the text.

Fiction

I can use what I know about characters and theme to explain what the author wants me to learn from reading a text.

<p>I can describe how the characters feel and think.</p> 	<p>I can describe how the characters act and react.</p> 
<p>I can explain how the characters change or develop throughout the story.</p> 	<p>I can use what already know and clues in the text to learn more about the characters.</p> 

	<p>I can identify what the author wants me to learn and include 3 or more details from the text that support my idea.</p>
	<p>I can identify what the author wants me to learn and include details from the text.</p>
	<p>I can use what I know about the characters and theme to identify what the author wants me to learn.</p>
	<p>I can identify the theme of the story.</p>

Studio Habit Self-Assessment

Self-Assessment Guide

Date:

Date:

Date:

I'm doing this well!

I'm doing parts of it well.

I'm not doing this yet.

Envision: I think about and try a few ideas before & during my art-making.

Developing Craft: I choose and use the textures and glazes thoughtfully.

Understand the Art World: I think about work by other artists from different communities in the world.

Envision: I think about and try a few ideas before & during my art-making.


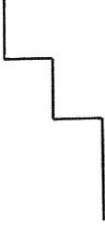
Developing Craft: I choose and use the textures and glazes thoughtfully.

Understand the Art World: I think about work by other artists from different communities in the world.

Envision: I think about and try a few ideas before & during my art-making.

Developing Craft: I choose and use the textures and glazes thoughtfully.

Understand the Art World: I think about work by other artists from different communities in the world.

Done Well	Success Criteria	Next Steps
	<p>Claim:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can make a claim identifying the traits of a character in a text. <p>Evidence:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can cite specific text evidence that supports my claim. <input type="checkbox"/> I can tell the page number or paragraph of where I found my evidence <input type="checkbox"/> I can use quotation marks when I am copying from a text. <p>Reasoning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can describe how the evidence supports my claim. <hr/> <p>Editing:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can edit my writing for capitalization errors. <input type="checkbox"/> I can edit my writing for errors in punctuation. <input type="checkbox"/> I can edit my writing for errors in spelling. <input type="checkbox"/> I have included the title of the book, author, and name of the character. 	

Converting Knowledge and Reasoning Learning Targets to Student-friendly Language

Learning target as written:

Obtaining, Evaluating and Communicating Information

Any education in science and engineering needs to develop students' ability to read and produce domain-specific text. As such, every science or engineering lesson is in part a language lesson, particularly reading and producing the genres of texts that are intrinsic to science and engineering. (NRC Framework, 2012, p. 76)

Grades 6-8

Obtaining, evaluating, and communicating information in 6–8 builds on K–5 experiences and progresses to evaluating the merit and validity of ideas and methods.

- Critically read scientific texts adapted for classroom use to determine the central ideas and/or obtain scientific and/or technical information to describe patterns in and/or evidence about the natural and designed world(s).
- Integrate qualitative and/or quantitative scientific and/or technical information in written text with that contained in media and visual displays to clarify claims and findings.
- Gather, read, and synthesize information from multiple appropriate sources and assess the credibility, accuracy, and possible bias of each publication and methods used, and describe how they are supported or not supported by evidence.
- Evaluate data, hypotheses, and/or conclusions in scientific and technical texts in light of competing information or accounts.
- Communicate scientific and/or technical information (e.g. about a proposed object, tool, process, system) in writing and/or through oral presentations.

Words to know

Analyze, interpret

Student-friendly definition(s):

Analyze: to look at carefully and in detail, to find the elements or parts

Interpret: to explain and give meaning

Student-friendly learning target(s):

I can/We are learning to engage in argument from evidence. This means:

I can look carefully at data and find the important parts, this means

- I can put data in tables, graphs, and pictures to see patterns.
- I can look at more than one set of data to find how they are alike and different.

I can give meaning to data, this means

- I can explain what the data means using ideas that we expect to be true.
- I can explain what the data means using math to show how they are related.
- I can explain how sets of data are alike and/or different.
- I can use what the data means to revise a problem or come up with a new way of doing something.
- I can use what the data means to revise an invention.

From Appendix F

- Critically read scientific texts adapted for classroom use to determine the central ideas and/or obtain scientific and/or technical information to describe patterns in and/or evidence about the natural and designed world(s).
- Integrate qualitative and/or quantitative scientific and/or technical information in written text with that contained in media and visual displays to clarify claims and findings.
- Gather, read, and synthesize information from multiple appropriate sources and assess the credibility, accuracy, and possible bias of each publication and methods used, and describe how they are supported or not supported by evidence.
- Evaluate data, hypotheses, and/or conclusions in scientific and technical texts in light of competing information or accounts.
- Communicate scientific and/or technical information (e.g. about a proposed object, tool, process, system) in writing and/or through oral presentations.

Converting Knowledge and Reasoning Learning Targets to Student-friendly Language

Learning target as written:

Developing and using models

Modeling can begin in the earliest grades, with students' models progressing from concrete "pictures" and/or physical scale models (e.g., a toy car) to more abstract representations of relevant relationships in later grades, such as a diagram representing forces on a particular object in a system.
(NRC Framework, 2012, p. 58)

6-8

Modeling in 6–8 builds on K–5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.

- Evaluate limitations of a model for a proposed object or tool.
- Develop or modify a model—based on evidence – to match what happens if a variable or component of a system is changed.
- Use and/or develop a model of simple systems with uncertain and less predictable factors.
- Develop and/or revise a model to show the relationships among variables, including those that are not observable but predict observable phenomena.
- Develop and/or use a model to predict and/or describe phenomena.
- Develop a model to describe unobservable mechanisms.
- Develop and/or use a model to generate data to test ideas about phenomena in natural or designed systems, including those representing inputs and outputs, and those at unobservable scales.

Words to know

Phenomenon, Model

Student-friendly definition(s):

Phenomenon: an object or aspect known through the senses rather than by thought or intuition

Model: A physical, visual, mathematical, or computational representation (description) of something that can be experienced in the real world but that cannot be experienced directly like an object or a process or a system that is too big, too small, too fast or too slow, too far away, etc. to be experienced. A model helps us to understand and study the phenomenon because it shares important characteristics with it. A model also has limitations and will never exactly represent the real world.

Student-friendly learning target(s):

I can/We are learning to make and use models.

I can make, use, and revise a model to show how things work together and to predict or describe events. This means:

- I can decide if the weaknesses in the model make it a good choice to use.
- I can make or revise a model of a system to show what happens when a part of the system is changed.

- I can use and/or make a model of a simple system with unpredictable parts.
- I can make or revise a model to show processes or events that we can not observe.
- I can make and/or use a model to gather data to test ideas about events or objects.

Converting Knowledge and Reasoning Learning Targets to Student-friendly Language

Learning target as written:

Analyzing and Interpreting Data

Once collected, data must be presented in a form that can reveal any patterns and relationships and that allows results to be communicated to others. Because raw data as such have little meaning, a major practice of scientists is to organize and interpret data through tabulating, graphing, or statistical analysis. Such analysis can bring out the meaning of data—and their relevance—so that they may be used as evidence. Engineers, too, make decisions based on evidence that a given design will work; they rarely rely on trial and error. Engineers often analyze a design by creating a model or prototype and collecting extensive data on how it performs, including under extreme conditions. Analysis of this kind of data not only informs design decisions and enables the prediction or assessment of performance but also helps define or clarify problems, determine economic feasibility, evaluate alternatives, and investigate failures. (NRC Framework, 2012, p. 61-62)

Grades 6-8

Analyzing data in 6–8 builds on K–5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.

- Construct, analyze, and/or interpret graphical displays of data and/or large data sets to identify linear and nonlinear relationships.
- Use graphical displays (e.g., maps, charts, graphs, and/or tables) of large data sets to identify temporal and spatial relationships.
- Distinguish between causal and correlational relationships in data. Analyze and interpret data to provide evidence for phenomena.
- Apply concepts of statistics and probability (including mean, median, mode, and variability) to analyze and characterize data, using digital tools when feasible.
- Consider limitations of data analysis (e.g., measurement error), and/or seek to improve precision and accuracy of data with better technological tools and methods (e.g., multiple trials).
- Analyze and interpret data to determine similarities and differences in findings.
- Analyze data to define an optimal operational range for a proposed object, tool, process or system that best meets criteria for success.

Words to know

Analyze, interpret, linear, nonlinear, phenomena, causal relationship, correlation, mean, median, mode, variability,

Student-friendly definition(s):

Analyze: to look at carefully and in detail, to find the elements or parts

Interpret: to explain and give meaning

Linear: a proportional relationship. The first quantity is related to the second quantity or the dependent variable is always related to the independent variable in the same way. For example as you double one the other one doubles, if one goes up by 5 the other goes down by 2. When you change the independent variable a set amount there is a specific amount of change in the dependent variable. Each time there is this same amount of change in the independent variable you will get always get the specific amount of change in the dependent variable. If you graph this relationship you will have a straight line.

Nonlinear: not a proportional relationship. A constant change in the first quantity is does not always result in a constant change in the second quantity. You will not get a straight line if you graph this relationship.

Student-friendly learning target(s):

I can/We are learning to analyze and interpret data This means:

I can read data and find the important features (parts), this means

- I can read large data sets.
- I can display data in ways that show linear and nonlinear relationships.
- I can identify time and space relationships in large data sets.
- I can state limitations of the data.
- I can suggest ways to improve the accuracy of the data.

I can give meaning to data, this means

- I can explain what the large data sets shows.
- I can explain how one part of the data is related to another part of the data.
- I can explain if one part of the data causes another part of the data to change.
- I can explain how data is evidence to support a claim.
- Use mean, median, mode, and variability to describe the data.
- I can explain limitations of the data.
- I can explain how sets of data are alike and/or different.
- I can use what the data means to tell the best range for a successful invention.

From Appendix F

- Construct, analyze, and/or interpret graphical displays of data and/or large data sets to identify linear and nonlinear relationships.
- Use graphical displays (e.g., maps, charts, graphs, and/or tables) of large data sets to identify temporal and spatial relationships.
- Distinguish between causal and correlational relationships in data. Analyze and interpret data to provide evidence for phenomena.
- Apply concepts of statistics and probability (including mean, median, mode, and variability) to analyze and characterize data, using digital tools when feasible.

- Consider limitations of data analysis (e.g., measurement error), and/or seek to improve precision and accuracy of data with better technological tools and methods (e.g., multiple trials).
- Analyze and interpret data to determine similarities and differences in findings.
- Analyze data to define an optimal operational range for a proposed object, tool, process or system that best meets criteria for success.

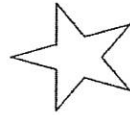
I can identify important characters from unimportant characters when I read.

Date:

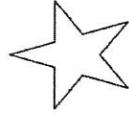
Evidence:

Standard/Learning Target: MS. ELA 1B2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

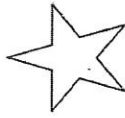
I can name the central idea/theme of a text, analyze how the CI/Theme changes over time, and summarize key ideas and details from the text.



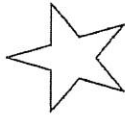
I know
what a
central
idea and a
theme is.



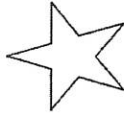
I can
compare/
contrast
central
ideas and
themes



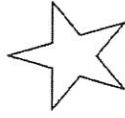
I can identify the strategies authors use to develop their ideas and themes



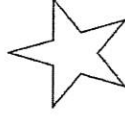
I can identify evidence from a text that shows how a CI or theme changes from the beginning of a text to the end.



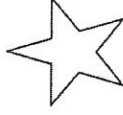
I can name
specific
evidence
that shows
how the
author
developed a
CI/theme
over time



I can identify key ideas and details that are relevant to the central idea or theme.



I can
organize my
summary to
identify a
CI/theme,
supported
by relevant
details.



I can share
my
summary
using
different
strategies,
including
speaking
and writing.

Date:

Evidence:

Date:

Evidence:

Date:

Evidence:

Date:

Evidence:

Date:

Evidence:

Date:

Evidence:

Date:

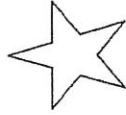
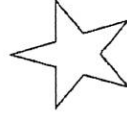
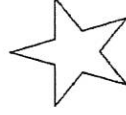
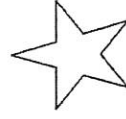
Evidence:

Date:

Evidence:

Standard/Learning Target: MS. ELA 1 A2: Reading closely to determine what the text says explicitly and to make logical inferences from it; cite specific evidence when writing or speaking to support conclusions drawn from the text.

MS.ELA 1C2 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions.



I can use a variety of source materials (Nonfiction/Fiction) to identify evidence that supports my thinking in conversation and writing.

I can select evidence from a text that is specific and relevant to my thinking and conclusions.

I reference information from the text to defend my ideas and thinking.

I can identify information that supports my thinking.

I can make inferences using what I read and my personal experiences.

I can describe the difference between an inference and a detail in a text.

I can identify ideas that are *explicit* in a text.

I can identify inferences.

Date: Date: Date: Date: Date: Date: Date:

Evidence: Evidence: Evidence: Evidence: Evidence: Evidence: Evidence:

Name: _____

I can read and understand a level 70/Z book.

<input type="checkbox"/> I can read with expression, emphasizing key phrases and words.	<input type="checkbox"/> I can use content knowledge to monitor understanding of complex texts.
<input type="checkbox"/> I can read in longer phrases with attention to punctuation.	<input type="checkbox"/> I can read 130 words or more per minute.
<input type="checkbox"/> I can read with at least 97% accuracy.	<input type="checkbox"/> I can read & understand:
	<input type="checkbox"/> Actively adding to vocabulary through reading.
	<input type="checkbox"/> Demonstrate flexibility in using different strategies

Fluency, Phonics & Vocabulary

<input type="checkbox"/> I can make and continually revise predictions based on previous reading and knowledge of content.	<input type="checkbox"/> I can identify the genre of the book.
<input type="checkbox"/> I can make predictions throughout a text based on text structure.	<input type="checkbox"/> I can identify the setting of the story and why it is important.
	<input type="checkbox"/> I can talk about the different choices the author made to make the story interesting to me.
	<input type="checkbox"/> I can write about the story:
<input type="checkbox"/> I can describe the most important message in the story and support my thinking with evidence from the text.	<input type="checkbox"/> summary in my own words, including:
<input type="checkbox"/> I can describe the impact of the author's message and support my thinking with supporting details from the text.	<input type="checkbox"/> *important characters * events and some details in sequence * vocabulary from text
	<input type="checkbox"/> central message
	<input type="checkbox"/> most important event and why it's important

Fiction Comprehension

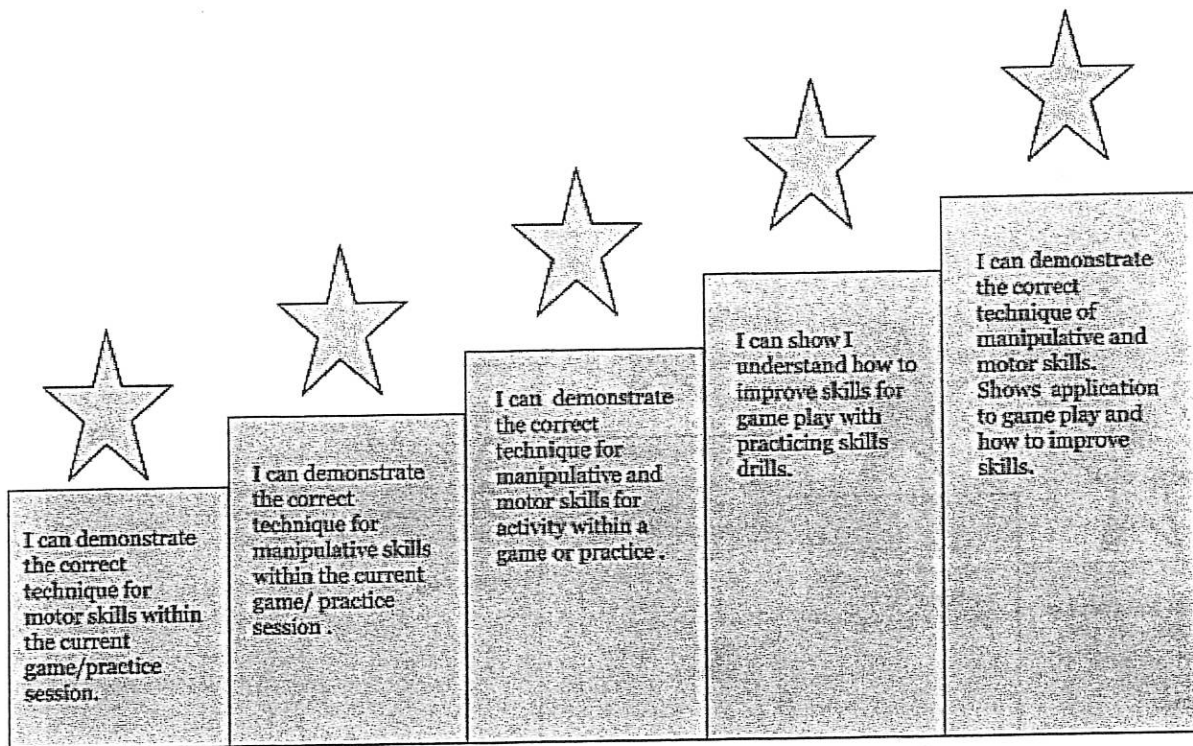
<input type="checkbox"/> I can make and justify predictions with evidence from the text.	<input type="checkbox"/> I can identify the genre of the book
<input type="checkbox"/> I can use multiple sources of information to confirm or disconfirm predictions.	<input type="checkbox"/> I can describe the effectiveness of telling through a specific POV
	<input type="checkbox"/> I can identify the central message of the text and use details to support my thinking
	<input type="checkbox"/> I can write about the text:
<input type="checkbox"/> I can write about how to use comprehension strategies to help understand the story.	<input type="checkbox"/> summary in my own words, including:
	<input type="checkbox"/> *important ideas Supporting facts from each text section * vocabulary from text
	<input type="checkbox"/> central message/cause and effect
	<input type="checkbox"/> most important message and why it's important

Nonfiction Comprehension

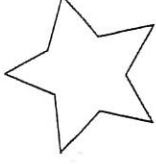
STARS AND STAIRS

MS.HPE.5C

Demonstrate correct technique for motor and manipulative skills and combine both skills during drills or modified games/physical activities (MLR G2). With this understanding students will be able to improve their skills and abilities while eliminating risk in games and physical activities.



Student Learning and Growth Goals Stars and Stairs *Tracking Progress by Learning Targets* (based on the work of Chappuis, 2015)



Name:

Standard/Learning Target:

I can develop a model based on evidence of Earth's interior to describe the cycling of matter through thermal convection.



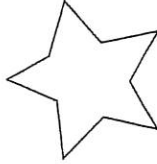
I can use the model of boiling oatmeal and the lava lamp to describe how temperature and density cause the lithosphere and asthenosphere to move in the mantle.



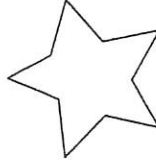
I can use the model of the movement of transparency pieces to describe how temperature affects density and causes plates to move because of the movement of magma in the mantle.



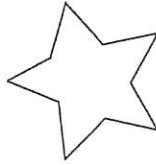
I can predict what will happen when plates of different rock types collide based on density.



I can calculate the density of basalt, granite, sandstone and rocks from Westbrook.



I can calculate density.



I can describe what happens to corn syrup, veggie oil and water in a density column.






I can create and describe my own diagram that shows how heat from the core causes matter to move and cycle through thermal convection.

Date:	Date:	Date:	Date:	Date:
Evidence:	Evidence:	Evidence:	Evidence:	Evidence:

UNIT 1: BIODIVERSITY

Learning Target #1:

I can use the fossil record to show how life has changed over time.

				
<p>I can describe the different types of fossils.</p>				<p>I can analyze data from the fossil record to show how life in the past was different from today.</p>
	<p>I can explain how fossils are formed.</p>	<p>I can explain what the fossil record is.</p>	<p>I can use relative dating to determine the age of different fossils.</p>	
<p>Date: Evidence:</p>	<p>Date: Evidence:</p>	<p>Date: Evidence:</p>	<p>Date: Evidence:</p>	<p>Date: Evidence:</p>