

# NextGen TIME

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Program Name: \_\_\_\_\_

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## Designed for the NGSS: Foundations Analyze Evidence

### Directions

1. Review the *Designed for the NGSS: Foundations Rubric*.
2. Reflect on the evidence (or lack of evidence) that you and your team gathered and represented.
3. Record strengths and limitations for each component based on your evidence. Cite specific examples.

Components		Strengths	Limitations
<b>Foundations</b>	<b>F1. Presence of Phenomena/Problems</b>		
	<b>F2. Presence of Three Dimensions</b>		
	<b>F3. Presence of Logical Sequence</b>		



## Designed for the NGSS: Student Work Evidence Chart

### Directions

1. Review your assigned materials to describe the path of student learning.
2. Represent your answers to the questions in the space provided.
3. Be prepared to share the path of student learning visually on a public chart.

Question	Answer (in words, graphics, or both)
<p>Answer the following questions as you describe the path of student learning in the materials. Consider what you would expect students to be thinking about through the learning experiences.</p> <p>What are students figuring out/solving?</p> <ol style="list-style-type: none"><li>a. What is driving student learning (e.g., question, scenario, problem, phenomenon)?</li><li>b. What ideas and practices do students develop through these experiences?</li><li>c. How do students access, engage, and use prior knowledge to further their thinking?</li><li>d. How do students develop metacognitive abilities?</li></ol>	



## Designed for the NGSS: Student Work Analyze Evidence

### Directions

1. Review the *Designed for the NGSS: Student Work Rubric*.
2. Reflect on the evidence (or lack of evidence) that you and your team gathered.
3. Record strengths and limitations for each criterion based on your observations. Cite specific examples.

Components		Strengths	Limitations
Student Work	SW1: Phenomena/ Problems		
	SW2: Three-Dimensional Conceptual Framework		
	SW3: Prior Knowledge		
	SW4: Metacognitive Abilities		
	SW5: Equitable Learning Opportunities		





## Designed for the NGSS: Student Progress Evidence Chart

### Directions

1. Review your assigned materials (both the student and teacher materials) to identify assessments of and for learning.
2. Respond to the prompts or answer the questions in the space provided for each identified assessment.
3. Be prepared to represent your responses visually on a public chart.

### Assessment Description

Page	Describe the assessment (e.g., number of questions, presence of tables/charts or graphs, and type of student work product)	Purpose of Assessment (e.g., peer, self, formative, summative, pre/post)	Type of Measure (e.g., performance task, discussion, multiple choice, constructed response)	Note evidence of bias or problems with accessibility.

### Match among Assessment, Phenomena/Problems, and Three Dimensions

<p>What phenomenon or problem, if any, are students trying to figure out in this assessment?</p>	<p>What is the 2- or 3-dimensional learning goal assessed in this task?</p>
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## Designed for the NGSS: Student Progress Analyze Evidence

### Directions

1. Review the *Designed for the NGSS: Student Progress Rubric*.
2. Reflect on the evidence (or lack of evidence) that you and your team gathered.
3. Record strengths and limitations for each criterion based on your observations. Cite specific examples.

	Components	Strengths	Limitations
<b>Student Progress</b>	<b>SP1: Three-Dimensional Performances</b>		
	<b>SP2: Variety of Measures</b>		
	<b>SP3: Student Progress Over Time</b>		
	<b>SP4: Equitable Access</b>		



## Designed for the NGSS: Foundations Teacher Support Evidence Chart

Teacher materials	Strong	Adequate	Weak
<b>F1. Presence of Phenomena/Problems.</b> Identify and provide background information about the phenomena/problems in the unit and how they match the targeted learning goals.			
<b>F2. Presence of Three Dimensions.</b> Identify and provide background information about each of the three dimensions in the unit. Also take note of any support for nature of science and engineering, technology, and applications of science.	- the SEPs		
	- the DCIs (including engineering)		
	- the CCCs		
	- <i>also note</i> NoS and ETS		
<b>F3. Presence of Logical Sequence.</b> Identify and provide background information on the sequence of learning in the unit.			
Strengths related to these Teacher Supports	Limitations related to these Teacher Supports		



## Designed for the NGSS: Student Work Teacher Support Evidence Chart

Teacher materials	Strong	Adequate	Weak
<b>SW1. Phenomena/Problems.</b> Provide support and strategies for how to help students figure out/solve authentic and relevant phenomena/problems using the three dimensions.			
<b>SW2. Three-Dimensional Conceptual Framework.</b> Provide support and strategies for how teachers <ul style="list-style-type: none"> <li>• help students develop a conceptual framework of scientifically accurate understandings and abilities related to</li> <li>• create a learning environment that values students’ ideas, motivates learning, and helps students negotiate new meaning as they interact with others’ ideas, new information, and new experiences.</li> </ul>	- DCIs, SEPs, and CCCs		
	- NoS and ETS		
	- ELA and math		
<b>SW3. Prior Knowledge.</b> Provide support and strategies to leverage students’ prior knowledge and experiences to motivate learning.			
<b>SW4. Metacognitive Abilities.</b> Provide support and strategies for how to help students develop metacognitive abilities.			
<b>SW5. Equitable Learning Opportunities.</b> Provide support, strategies, and resources for how to ensure that <i>all</i> students, including those from nondominant groups and with diverse learning needs, have access to the targeted learning goals and experiences.			
Strengths related to these Teacher Supports	Limitations related to these Teacher Supports		





## Designed for the NGSS: Student Progress Teacher Support Evidence Chart

Teacher materials	Strong	Adequate	Weak
<b>SP1. Three-Dimensional Performances.</b> Provide support with a range of sample student responses and/or rubrics for interpreting evidence of student learning across the three dimensions, specific to the element of each dimension, and related to the phenomenon/problem that provides context for the student performance.			
<b>SP2. Variety of Measure.</b> Provide guidance and scoring tools for using a variety of measures matched to the targeted learning goals to help students monitor their progress toward learning goals and reflect on what they have learned, how they learn it, and how to use metacognition productively.			
<b>SP3. Student Progress Over Time.</b> Provide guidance for using formative and summative assessments to monitor student progress over time. Examples include support for capturing student growth, interpreting results, adjusting instruction and planning for future instruction, providing feedback to students, and prompting students to consider what and how they've learned.			
<b>SP4. Equitable Access.</b> Provide support, strategies, and resources for ensuring that assessments are accessible to students from diverse backgrounds and with diverse learning needs.			

Strengths related to these Teacher Supports	Limitations related to these Teacher Supports



## Designed for the NGSS: Program Analyze Evidence

**Directions**

1. Review *Designed for the NGSS: Program Rubric* (see last page)
2. Review the teacher materials and/or student materials to assess the strength of each element.
3. Record strengths and limitations for each component based on your evidence. Cite specific examples.

<b>PROGRESSIONS OF LEARNING. Within a program, learning experiences are more likely to help students develop a greater sophistication of understanding of the elements of SEPs, CCCs, and DCIs when teacher materials</b>	<b>Strong</b>	<b>Adequate</b>	<b>Weak</b>
<ul style="list-style-type: none"> <li>● make it clear how each of the three dimensions builds logically and progressively over the course of the program and make clear how students                             <ul style="list-style-type: none"> <li>○ engage in the science and engineering practices with increasing grade-level-appropriate complexity over the course of the program.</li> <li>○ utilize the crosscutting concepts with increasing grade-level-appropriate complexity over the course of the program.</li> <li>○ engage in grade-level/band-appropriate disciplinary core ideas.</li> <li>○ make clear how the performance expectations are addressed in the program.</li> </ul> </li> <li>● provide a rationale for a logical sequence and treatment of ETS and NoS.</li> </ul>			
<b>Strengths</b>	<b>Limitations</b>		



<b>UNIT-TO-UNIT COHERENCE. Units across a program demonstrate coherence when student materials</b>	<b>Strong</b>	<b>Adequate</b>	<b>Weak</b>
<ul style="list-style-type: none"> <li>are designed with an appropriate sequence and development of DCIs, CCCs, and SEPs to support students in demonstrating learning across a program as they figure out phenomena/problems.</li> </ul>			
<ul style="list-style-type: none"> <li>make explicit connections from one unit to the next across the three dimensions to connect prior learning, current learning, and future learning as students figure out phenomena/problems.</li> </ul>			
<ul style="list-style-type: none"> <li>support students in making connections across units and disciplines by helping students negotiate more sophisticated understandings and abilities.</li> </ul>			

<b>Strengths</b>	<b>Limitations</b>



<b>PROGRAM ASSESSMENT SYSTEM. Over the course of the program, teacher materials will demonstrate a system of assessments that</b>		<b>Strong</b>	<b>Adequate</b>	<b>Weak</b>
<ul style="list-style-type: none"> <li>coordinates the variety of ways student learning is monitored to provide information to students and teachers regarding student progress for all three dimensions of the standards and toward proficiency at the identified grade-level/band performance expectations.</li> </ul>				
<ul style="list-style-type: none"> <li>includes support for teachers and other leaders to make program-level decisions based on unit, interim, and/or year-long summative assessment data.</li> </ul>				
<ul style="list-style-type: none"> <li>is driven by an assessment framework and provides a structured conceptual map of student learning along with details of how achievement of the outcomes can be measured.</li> </ul>				
<b>Strengths</b>		<b>Limitations</b>		