

# Shelley MOORE PH.D.



@tweetsomemoore



@fivemooreminutes



@fivemooreminutes



[www.fivemooreminutes.com](http://www.fivemooreminutes.com)

[www.blogsomemoore.com](http://www.blogsomemoore.com)

What grade level curriculum are we using?  
What are the learning standards?

## CURRICULUM & ASSESSMENT DESIGN

Student choice of challenge  
Adjustable Curriculum

# Students

Who are the pilots?  
What are their dimensions?  
Where is their agency?

Student choice of evidence  
Adjustable Assessment

## NEEDS BASED DESIGN

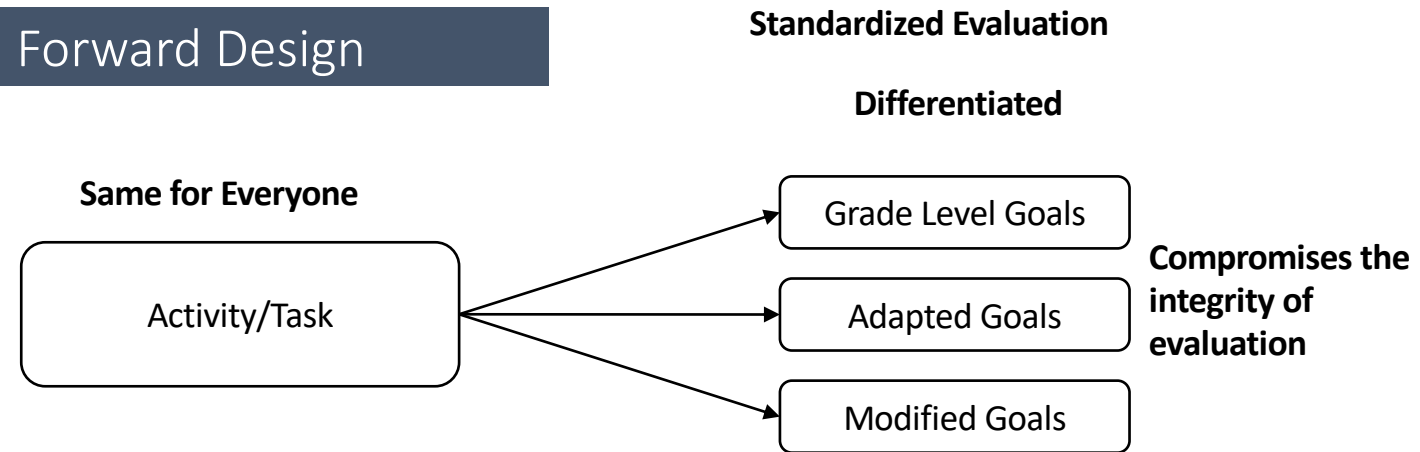
What are the student needs?  
What barriers are getting in the way?  
What do student require to navigate  
needs & barriers?

Adjustable Supports & Strategies  
Student choice of tools and actions

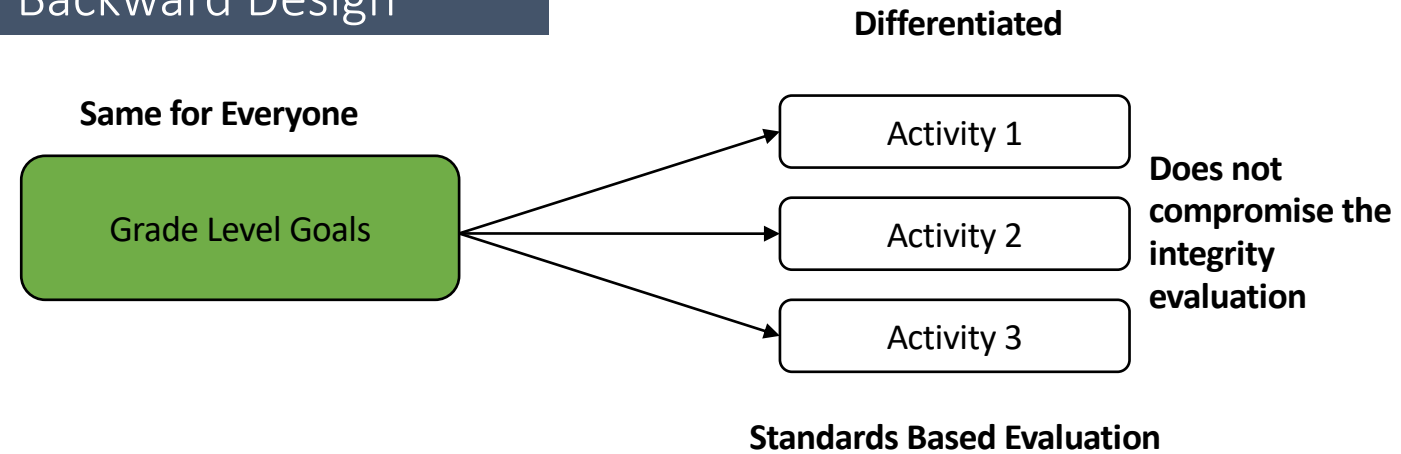
## INSTRUCTIONAL DESIGN

How will students show growth  
within the learning standard?  
How do we know?

## Forward Design



## Backward Design



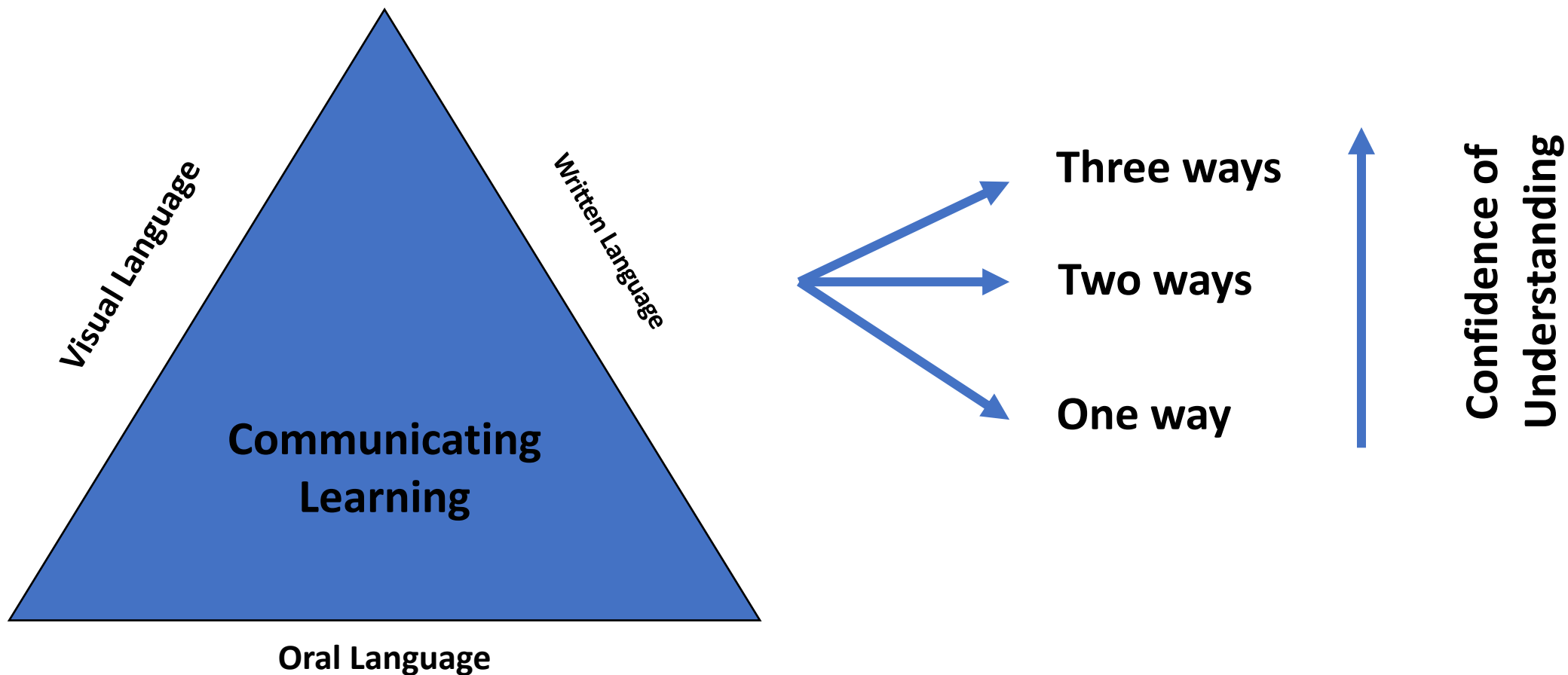
Grade:	Subject Area: Science	Strand/Topic:
<b>Learning Standard:</b> HS-LS1-1. Construct an explanation based on evidence for how the <b>structure of DNA</b> determines the <b>structure of proteins</b> which carry out the <b>essential functions of life</b> through <b>systems of specialized cells</b>		<b>Unit Guiding Question(s):</b> What is the <b>structure of DNA</b> ? What is <b>DNA</b> ? What does DNA look like? What does DNA do? How are the structures of DNA and the structures of <b>proteins</b> related? How can I use <b>evidence</b> to explain how the <b>structure of DNA</b> impacts that <b>structure of proteins</b> ? How are the <b>structure of proteins</b> and related to the <b>essential functions of life</b> ? What is the role the <b>systems of specialized cells</b> ?
<b>Key Vocabulary:</b> theories and laws, evidence, natural world, <b>structure of DNA, DNA, proteins, essential functions of life, life, systems of specialized cells, organisms</b>		
Learning Goals	Curricular Language What do Students need to Know and Do?	Student Friendly Language
Science and Engineering Practices (skills)	Construct an explanation based on valid and reliable <b>evidence</b> obtained from a variety of sources (including students' own investigations, models, theories, simulations, peer review) and the assumption that <b>theories and laws</b> that <b>describe the natural world</b> operate today as they did in the <b>past , present, future</b> .	I can explain using <b>evidence</b> that there are <b>theories and laws</b> that describe the <b>natural world</b>  - I know what <b>evidence</b> is - I know what science and <b>theories and laws*</b> are - I know what the <b>natural world</b> is
Disciplinary Core Ideas (knowledge)	Disciplinary Core Ideas LS1.A: Structure and Function  ☐ <b>Systems of specialized cells</b> within <b>organisms</b> help them perform the <b>essential functions of life</b> .  ☐ All <b>cells</b> contain <b>genetic information</b> in the form of <b>DNA molecules</b> . <b>Genes</b> are regions in the <b>DNA</b> that contain the instructions that code for the formation of <b>proteins</b> , which carry out most of the <b>work of cells</b> .	I know that the <b>systems of specialized cells</b> inside <b>organisms</b> perform <b>essential functions of life</b> • I know what <b>systems of specialized cells</b> are • I know what <b>organisms</b> are • I know what the <b>essential* functions of life</b> are  I know that cells have genetic information in DNA molecules I know that genes are parts of DNA that are instructions for how proteins are formed I know how cells work
Crosscutting Concepts (Big Idea)	Structure and Function ☐ Investigating or designing new systems or <b>structures</b> requires a detailed examination of the <b>properties</b> of different <b>materials</b> , the structures of different <b>components</b> , and <b>connections</b> of components to reveal its function and/or <b>solve a problem</b> .	I understand that structures are made of many different components that are connected and have specific functions.



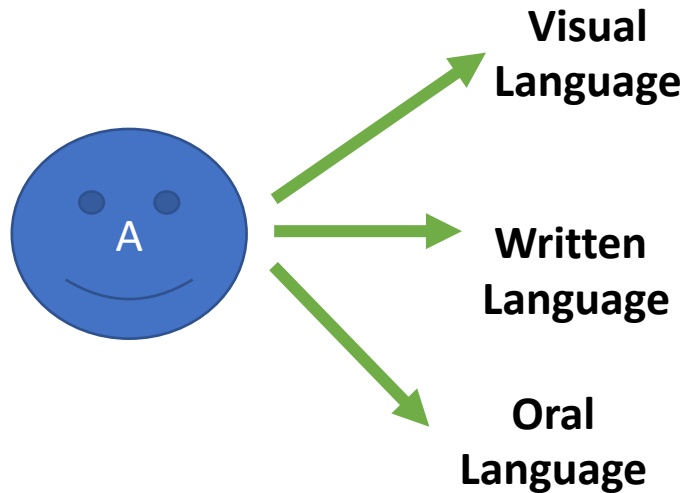
Name:		Date:
<b>Performance Expectation:</b> HS-LS1-1. Construct an explanation based on evidence for how the <b>structure of DNA</b> determines the <b>structure of proteins</b> which carry out the <b>essential functions</b> of <b>life</b> through <b>systems of specialized cells</b>		
<b>Important words to know and use:</b> theories and laws, evidence, natural world, structure of DNA, DNA, proteins, essential functions of life, life, systems of specialized cells, organisms		
I still need support	Learning Goals	I need some challenge
	<ul style="list-style-type: none"><li>I can explain using <b>evidence</b> that there are <b>theories and laws</b> that describe the <b>natural world</b></li></ul>	
	<ul style="list-style-type: none"><li>I know that the <b>systems of specialized cells</b> inside <b>organisms</b> perform <b>essential functions of life</b></li></ul>	
	<ul style="list-style-type: none"><li>I know that <b>cells</b> have <b>genetic information</b> in <b>DNA molecules</b></li></ul>	
	<ul style="list-style-type: none"><li>I know that <b>genes</b> are parts of <b>DNA</b> that are instructions for how <b>proteins</b> are formed</li></ul>	
	<ul style="list-style-type: none"><li>I know how <b>cells</b> work</li></ul>	
	<ul style="list-style-type: none"><li>I understand that <b>structures</b> are made of many different <b>components</b> that are <b>connected</b> and have specific <b>functions</b>.</li></ul>	

Name:	Date:
<b>Performance Expectation:</b> HS-LS1-1. Construct an explanation based on evidence for how the <b>structure of DNA</b> determines the <b>structure of proteins</b> which carry out the <b>essential functions</b> of <b>life</b> through <b>systems of specialized cells</b>	
<b>Important words to know and use:</b> theories and laws, evidence, natural world, structure of DNA, DNA, proteins, essential functions of life, life, systems of specialized cells, organisms	
Learning Goals	Evidence of Learning
<ul style="list-style-type: none"><li>I can explain using <b>evidence</b> that there are <b>theories and laws</b> that describe the <b>natural world</b></li></ul>	
<ul style="list-style-type: none"><li>I know that the <b>systems of specialized cells</b> inside <b>organisms</b> perform <b>essential functions of life</b></li><li>I know that <b>cells</b> have <b>genetic information</b> in <b>DNA molecules</b></li><li>I know that <b>genes</b> are parts of <b>DNA</b> that are instructions for how <b>proteins</b> are formed</li><li>I know how <b>cells</b> work</li></ul>	
<ul style="list-style-type: none"><li>I understand that <b>structures</b> are made of many different <b>components</b> that are <b>connected</b> and have specific <b>functions</b>.</li></ul>	

# How do student show what they know?



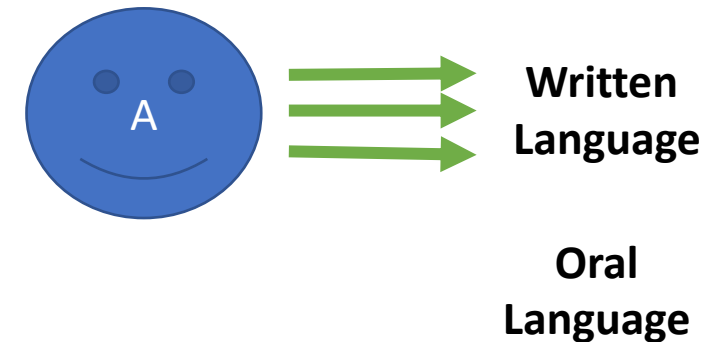
# All Languages (in literacy) are Treated Equal!



The **MORE WAYS** students can demonstrate learning, the more confident we are of meeting a goal

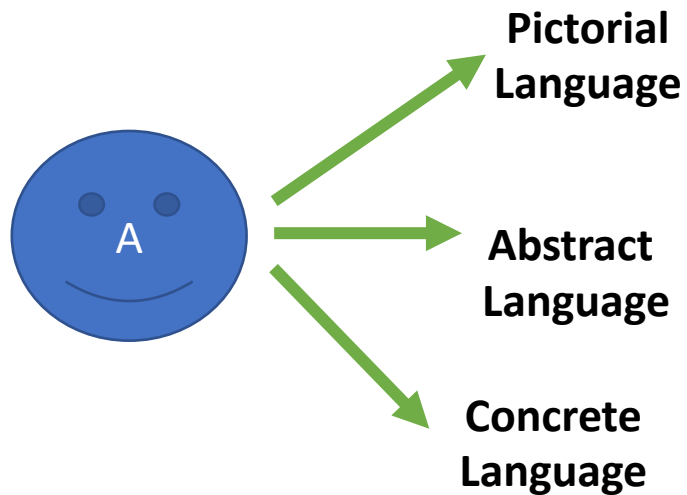
**Instead of**

The **NUMBER OF TIMES**, a student can show their learning in one way, the more confident we are of meeting a goal





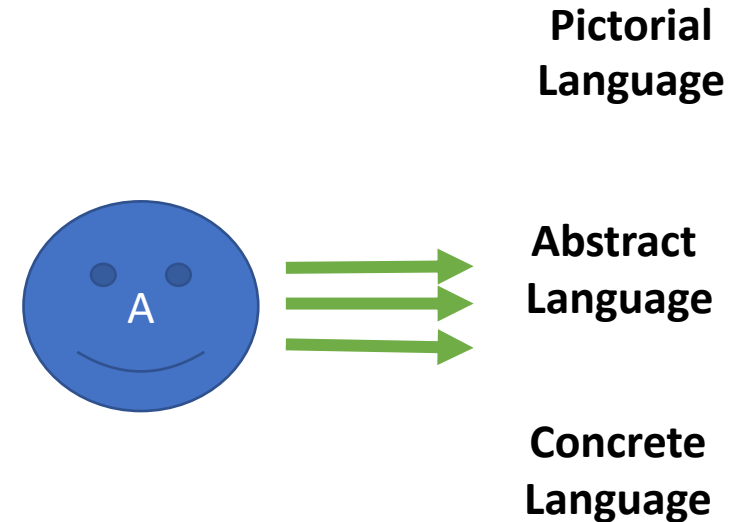
# All Languages (in numeracy) are Treated Equal!



The **MORE WAYS** students can demonstrate learning, the more confident we are of meeting a goal

**Instead of**

The **NUMBER OF TIMES**, a student can show their learning in one way, the more confident we are of meeting a goal



Grade: 9	Subject Area: Science	Strand/Topic:
<b>Learning Standard:</b> HS-LS1-1. Construct an explanation based on evidence for how the <b>structure of DNA</b> determines the <b>structure of proteins</b> which carry out the <b>essential functions</b> of <b>life</b> through <b>systems of specialized cells</b>		<b>Unit Guiding Question(s):</b> What is the <b>structure of DNA</b> ? What is <b>DNA</b> ? What does DNA look like? What does DNA do? How are the structures of DNA and the structures of <b>proteins</b> related? How can I use <b>evidence</b> to explain how the <b>structure of DNA</b> impacts that <b>structure of proteins</b> ? How are the <b>structure of proteins</b> and related to the <b>essential functions of life</b> ? What is the role the <b>systems of specialized cells</b> ?
<b>Key Vocabulary:</b> theories and laws, evidence, natural world, <b>structure of DNA</b> , <b>DNA</b> , <b>proteins</b> , <b>essential functions of life</b> , <b>life</b> , <b>systems of specialized cells</b> , organisms		
Learning Goals	Curricular Language What do Students need to Know and Do?	Student Friendly Language
Science and Engineering Practices (skills)	Construct an explanation based on valid and reliable <b>evidence</b> obtained from a variety of sources (including students' own investigations, models, theories, simulations, peer review) and the assumption that <b>theories and laws</b> that <b>describe the natural world</b> operate today as they did in the <b>past</b> , <b>present</b> , <b>future</b> .	I can explain using <b>evidence</b> that there are <b>theories and laws</b> that describe the <b>natural world</b> <ul style="list-style-type: none"> <li>- I know what <b>evidence</b> is</li> <li>- I know what science and <b>theories and laws*</b> are</li> <li>- I know what the <b>natural world</b> is</li> </ul>
Disciplinary Core Ideas (knowledge)	Disciplinary Core Ideas LS1.A: Structure and Function  [?] <b>Systems of specialized cells</b> within <b>organisms</b> help them perform the <b>essential functions of life</b> .  [?] All <b>cells</b> contain <b>genetic information</b> in the form of <b>DNA molecules</b> . <b>Genes</b> are regions in the <b>DNA</b> that contain the instructions that code for the formation of <b>proteins</b> , which carry out most of the <b>work of cells</b> .	I know that the <b>systems of specialized cells</b> inside <b>organisms</b> perform <b>essential functions of life</b> <ul style="list-style-type: none"> <li>• I know what <b>systems of specialized cells</b> are</li> <li>• I know what <b>organisms</b> are</li> <li>• I know what the <b>essential*</b> <b>functions of life</b> are</li> </ul> I know that cells have genetic information in DNA molecules I know that genes are parts of DNA that are instructions for how proteins are formed I know how cells work
Crosscutting Concepts (Big Idea)	Structure and Function [?] Investigating or designing new systems or <b>structures</b> requires a detailed examination of the <b>properties</b> of different <b>materials</b> , the structures of different <b>components</b> , and <b>connections</b> of components to reveal its function and/or <b>solve a problem</b> .	I understand that structures are made of many different components that are connected and have specific functions.

Grade: 9		Subject Area: Science		Strand/Topic:		
<b>Learning Standard:</b> HS-LS1-1. Construct an explanation based on evidence for how the <b>structure of DNA</b> determines the <b>structure of proteins</b> which carry out the <b>essential functions of life</b> through <b>systems of specialized cells</b>				<b>Unit Guiding Question(s):</b> <b>What is the <b>structure of DNA</b>? What is <b>DNA</b>? What does DNA look like? What does DNA do?</b> <b>How are the structures of DNA and the structures of <b>proteins</b> related?</b> <b>How can I use <b>evidence</b> to explain how the <b>structure of DNA</b> impacts that <b>structure of proteins</b>?</b> <b>How are the <b>structure of proteins</b> and related to the <b>essential functions of life</b>?</b> <b>What is the role the <b>systems of specialized cells</b>?</b>		
<b>Key Vocabulary:</b> theories and laws, evidence, natural world, <b>structure of DNA</b> , <b>DNA</b> , <b>proteins</b> , <b>essential functions of life</b> , <b>life</b> , <b>systems of specialized cells</b> , organisms						
Learning Goals	Curricular Language What do Students need to Know and Do?			Summative Task: The Cell-tastic voyage: Exploring the Wonders of Cellular Structures and Functions		
				Visual/pictorial/ concrete (observations)	Written/abstract (products)	Oral language/ presentations (conversations)
Science and Engineering Practices (skills)	Construct an explanation based on valid and reliable <b>evidence</b> obtained from a variety of sources (including students’ own investigations, models, theories, simulations, peer review) and the assumption that <b>theories and laws</b> that <b>describe the natural world</b> operate today as they did in the <b>past , present, future</b> .	<ul style="list-style-type: none"><li>I can explain using <b>evidence</b> that there are <b>theories and laws</b> that describe the <b>natural world</b></li></ul>		hands-on demonstration	Written experimental plan	experimental design as part of an adventurous quest
Disciplinary Core Ideas (knowledge)	Disciplinary Core Ideas LS1.A: Structure and Function ☐ <b>Systems of specialized cells</b> within <b>organisms</b> help them perform the <b>essential functions of life</b> . ☐ All <b>cells</b> contain <b>genetic information</b> in the form of <b>DNA molecules</b> . <b>Genes</b> are regions in the <b>DNA</b> that contain the instructions that code for the formation of <b>proteins</b> , which carry out most of the <b>work of cells</b> .	<ul style="list-style-type: none"><li>I know that the <b>systems of specialized cells</b> inside <b>organisms</b> perform <b>essential functions of life</b></li><li>I know that <b>cells</b> have <b>genetic information</b> in <b>DNA molecules</b></li><li>I know that <b>genes</b> are parts of <b>DNA</b> that are instructions for how <b>proteins</b> are formed</li><li>I know how <b>cells</b> work</li></ul>		3D model of a cell	infographic or poster	a virtual tour
Crosscutting Concepts (Big Idea)	Structure and Function ☐ Investigating or designing new systems or <b>structures</b> requires a detailed examination of the <b>properties</b> of different <b>materials</b> , the structures of different <b>components</b> , and <b>connections</b> of components to reveal its function and/or <b>solve a problem</b> .	<ul style="list-style-type: none"><li>I understand that <b>structures</b> are made of many different <b>components</b> that are <b>connected</b> and have specific <b>functions</b>.</li></ul>		Visual reflection	Written reflection	Oral reflection

Name:			Date:			
Performance Expectation: HS-LS1-1. Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells						
Goals	My evidence of learning	Showing my Learning			I Need Support	I Need Challenge
	Actvtivities/ tasks	written	oral	visual		
<ul style="list-style-type: none"><li>I can explain using evidence that there are theories and laws that describe the natural world</li></ul>						
<ul style="list-style-type: none"><li>I know that the systems of specialized cells inside organisms perform essential functions of life</li><li>I know that cells have genetic information in DNA molecules</li><li>I know that genes are parts of DNA that are instructions for how proteins are formed</li><li>I know how cells work</li></ul>						
<ul style="list-style-type: none"><li>I understand that structures are made of many different components that are connected and have specific functions.</li></ul>						

## 1. Standards based vs. standardized curriculum

Kristine Nannini YoungTeacherLove

# Standards Based Grading

...helps teachers:

Give quality feedback

In the traditional grade book, Katie and her parents would see her grades and think she is getting by just fine.

But standards based grading reveals that she has not completely mastered the standards.

### Traditional Grade Book

Name	Homework	Quiz 1	Quiz 2	Chapter 2 Test
Katie	90%	88%	82%	80%
Joe	60%	75%	88%	70%
Sara	10%	90%	98%	100%
John	100%	50%	60%	54%

### Standards Based Grade Book

	Standard 1: Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Standard 2: Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.	Standard 3: Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.
Katie	4	2	2
Joe	2	3	1

# An Additive Continuum of Proficiency

Reporting Language	Approaching Grade Level (Not Yet)	Grade Level Essential (Partial)	Grade Level Confident (Fully)	Extending Grade Level
Grade Level Learning Standard				

The diagram illustrates an additive continuum of proficiency across four levels: Approaching Grade Level (Not Yet), Grade Level Essential (Partial), Grade Level Confident (Fully), and Extending Grade Level. The progression is shown by arrows:

- A light blue arrow labeled "Incomplete (1)" points from the first column to the second.
- A dark blue arrow labeled "2" points from the second column to the third.
- A dark blue arrow labeled "3" points from the third column to the fourth.
- A light blue arrow labeled "4" points from the fourth column to the right, indicating further progression.



Next Generation Science Standards (NGSS)		
Subject Area: Science	Strand: Matter and Its Interactions	Grade: 5
<b>Performance Expectation: 5-PS1-1</b> <b>Students can develop a model to describe that matter is made of particles too small to be seen</b>		<b>Guiding Unit Question:</b> How do we know that something exists if we cannot see it?
<b>Unit Vocabulary (Content):</b> properties, structures, scale, proportion, quantity, models, particles, bulk matter,		<b>Unit Vocabulary (Skills):</b> make, observe



Foundations	Student Friendly Language	Access Point	Essential	Confident	Extend
<b>Science &amp; Engineering Practices</b>	I can make a model to help me understand an idea by:	following/ participating in creating a model	planning and creating a model	creating a model to solve a problem	Adjusting or revising a model I have created
<b>Disciplinary Core Ideas</b>	I know that matter is made up of particles that are too small to see by:  I know that models can help us see particles that are too small to see by:	describing what matter is  describing that there are different states of matter  describing examples of different kinds of matter in the world	describing what bulk matter is  describing that matter (that I can see) is made up of tiny particles (that are too small to see)  describing examples of models that help to observe particles that are too small to see	describing how collecting many tiny particles can help us observe how matter takes up space  describing which part of the model is bulk matter, and which part of the model is particles	describing the relationship between matter and particles  using the model to describe the relationship between matter and how particles move when they are collected
<b>Crosscutting Concepts</b>	I know that objects in the world can be very large and very small by:	describing objects in the world that are very small and very large	describing what microscopic and macroscopic is and examples of each in the world	describing what is similar and what is different between microscopic and macroscopic objects in the world	describing what scale is and how it helps us understand microscopic and macroscopic objects

**\*Description: can include but are not limited to written, oral, pictorial, and kinesthetic**

Standards Based Grade Book (NGSS)																	
Learning Standard/ Performance Expectation													Evaluation				
Possible Evidence of Learning													Total	Out of	%	Letter Grade	4-Point
Reporting Language	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending					
Evaluation	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4					
Student 1 (IEP)																	
Student 2																	
Student 3																	
Student 4																	
Student 5																	
Student 6																	

Standards Based Grade Book (NGSS)																	
Learning Standard/ Performance Expectation	5-PS1-1. Develop a <b>model</b> to describe that <b>matter</b> is made of <b>particles</b> too small to be seen												Evaluation				
	Science and Engineering Practices				Disciplinary Core Ideas				Crosscutting Concepts				Total	Out of	%	Letter Grade	4-Point
Possible Evidence of Learning																	
Reporting Language	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending					
Evaluation	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4		12			
Student 1 (IEP)	•				•				•	•			3	3*	100%	A*	4*
Student 2	•	•			•	•			•	•			7.5	12	63%	D	2.5
Student 3	•	•	•	•	•	•	•	•	•	•	•		11	12	92%	A-	3.67
Student 4			•	•	•	•	•		•	•			IE	12			
Student 5	•	•	•	•	•	•							IE	12			
Student 6	•	•	•		•	•	•	•	•	•	•	•	11	12	92%	A-	3.67

## Student 1 (IEP)

Next Generation Science Standards (NGSS)		
Subject Area: Science	Strand: Matter and Its Interactions	Grade: 5
<b>Performance Expectation: 5-PS1-1</b> Students can develop a model to describe that matter is made of particles too small to be seen		<b>Guiding Unit Question:</b> How do we know that something exists if we cannot see it?
<b>Unit Vocabulary (Content):</b> properties, structures, scale, proportion, quantity, models, particles, bulk matter,		<b>Unit Vocabulary (Skills):</b> make, observe



Foundations	Student Friendly Language	Access Point	Essential	Confident	Extend
<b>Science &amp; Engineering Practices</b>	I can make a model to help me understand an idea by:	following/ participating in creating a model	planning and creating a model	creating a model to solve a problem	Adjusting or revising a model I have created
<b>Disciplinary Core Ideas</b>	I know that matter is made up of particles that are too small to see by:  I know that models can help us see particles that are too small to see by:	describing what matter is  describing that there are different states of matter  describing examples of different kinds of matter in the world	describing what bulk matter is  describing that matter (that I can see) is made up of tiny particles (that are too small to see)  describing examples of models that help to observe particles that are too small to see	describing how collecting many tiny particles can help us observe how matter takes up space  describing which part of the model is bulk matter, and which part of the model is particles	describing the relationship between matter and particles  using the model to describe the relationship between matter and how particles move when they are collected
<b>Crosscutting Concepts</b>	I know that objects in the world can be very large and very small by:	describing objects in the world that are very small and very large	describing what microscopic and macroscopic is and examples of each in the world	describing what is similar and what is different between microscopic and macroscopic objects in the world	describing what scale is and how it helps us understand microscopic and macroscopic objects

**\*Description:** can include but are not limited to written, oral, pictorial, and kinesthetic

Standards Based Grade Book (NGSS)																	
Learning Standard/ Performance Expectation	5-PS1-1. Develop a <b>model</b> to describe that <b>matter</b> is made of <b>particles</b> too small to be seen												Evaluation				
	Science and Engineering Practices				Disciplinary Core Ideas				Crosscutting Concepts				Total	Out of	%	Letter Grade	4-Point
Possible Evidence of Learning																	
Reporting Language	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending					
Evaluation	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4		12			
Student 1 (IEP)	•				•				•	•			3	3*	100%	A*	4*
Student 2	•	•			•	•			•	•			7.5	12	63%	D	2.5
Student 3	•	•	•	•	•	•	•	•	•	•	•		11	12	92%	A-	3.67
Student 4			•	•	•	•	•		•	•			IE	12			
Student 5	•	•	•	•	•	•							IE	12			
Student 6	•	•	•		•	•	•	•	•	•	•	•	11	12	92%	A-	3.67

Student 2 – 63%

Next Generation Science Standards (NGSS)		
Subject Area: Science	Strand: Matter and Its Interactions	Grade: 5
<b>Performance Expectation: 5-PS1-1</b> Students can develop a model to describe that matter is made of particles too small to be seen		<b>Guiding Unit Question:</b> How do we know that something exists if we cannot see it?
<b>Unit Vocabulary (Content):</b> properties, structures, scale, proportion, quantity, models, particles, bulk matter,		<b>Unit Vocabulary (Skills):</b> make, observe



Foundations	Student Friendly Language	Access Point	Essential	Confident	Extend
<b>Science &amp; Engineering Practices</b>	I can make a model to help me understand an idea by:	following/ participating in creating a model	planning and creating a model	creating a model to solve a problem	Adjusting or revising a model I have created
<b>Disciplinary Core Ideas</b>	I know that matter is made up of particles that are too small to see by:  I know that models can help us see particles that are too small to see by:	describing what matter is  describing that there are different states of matter  describing examples of different kinds of matter in the world	describing what bulk matter is  describing that matter (that I can see) is made up of tiny particles (that are too small to see)  describing examples of models that help to observe particles that are too small to see	describing how collecting many tiny particles can help us observe how matter takes up space  describing which part of the model is bulk matter, and which part of the model is particles	describing the relationship between matter and particles  using the model to describe the relationship between matter and how particles move when they are collected
<b>Crosscutting Concepts</b>	I know that objects in the world can be very large and very small by:	describing objects in the world that are very small and very large	describing what microscopic and macroscopic is and examples of each in the world	describing what is similar and what is different between microscopic and macroscopic objects in the world	describing what scale is and how it helps us understand microscopic and macroscopic objects

**\*Description:** can include but are not limited to written, oral, pictorial, and kinesthetic



Standards Based Grade Book (NGSS)																	
Learning Standard/ Performance Expectation	5-PS1-1. Develop a <b>model</b> to describe that <b>matter</b> is made of <b>particles</b> too small to be seen												Evaluation				
	Science and Engineering Practices				Disciplinary Core Ideas				Crosscutting Concepts				Total	Out of	%	Letter Grade	4-Point
Possible Evidence of Learning																	
Reporting Language	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending					
Evaluation	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4		12			
Student 1 (IEP)	•				•				•	•			3	3*	100%	A*	4*
Student 2	•	•			•	•			•	•			7.5	12	63%	D	2.5
Student 3	•	•	•	•	•	•	•	•	•	•	•		11	12	92%	A-	3.67
Student 4			•	•	•	•	•		•	•			IE	12			
Student 5	•	•	•	•	•	•							IE	12			
Student 6	•	•	•		•	•	•	•	•	•	•	•	11	12	92%	A-	3.67

Student 3 – 92%

Next Generation Science Standards (NGSS)		
Subject Area: Science	Strand: Matter and Its Interactions	Grade: 5
<b>Performance Expectation: 5-PS1-1</b> Students can develop a model to describe that matter is made of particles too small to be seen		<b>Guiding Unit Question:</b> How do we know that something exists if we cannot see it?
<b>Unit Vocabulary (Content):</b> properties, structures, scale, proportion, quantity, models, particles, bulk matter,		<b>Unit Vocabulary (Skills):</b> make, observe



Foundations	Student Friendly Language	Access Point	Essential	Confident	Extend
<b>Science &amp; Engineering Practices</b>	I can make a model to help me understand an idea by:	following/ participating in creating a model	planning and creating a model	creating a model to solve a problem	Adjusting or revising a model I have created
<b>Disciplinary Core Ideas</b>	I know that matter is made up of particles that are too small to see by:  I know that models can help us see particles that are too small to see by:	describing what matter is  describing that there are different states of matter  describing examples of different kinds of matter in the world	describing what bulk matter is  describing that matter (that I can see) is made up of tiny particles (that are too small to see)  describing examples of models that help to observe particles that are too small to see	describing how collecting many tiny particles can help us observe how matter takes up space  describing which part of the model is bulk matter, and which part of the model is particles	describing the relationship between matter and particles  using the model to describe the relationship between matter and how particles move when they are collected
<b>Crosscutting Concepts</b>	I know that objects in the world can be very large and very small by:	describing objects in the world that are very small and very large	describing what microscopic and macroscopic is and examples of each in the world	describing what is similar and what is different between microscopic and macroscopic objects in the world	describing what scale is and how it helps us understand microscopic and macroscopic objects

**\*Description:** can include but are not limited to written, oral, pictorial, and kinesthetic

Standards Based Grade Book (NGSS)																	
Learning Standard/ Performance Expectation	5-PS1-1. Develop a <b>model</b> to describe that <b>matter</b> is made of <b>particles</b> too small to be seen												Evaluation				
	Science and Engineering Practices				Disciplinary Core Ideas				Crosscutting Concepts				Total	Out of	%	Letter Grade	4-Point
Possible Evidence of Learning																	
Reporting Language	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending					
Evaluation	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4		12			
Student 1 (IEP)	•				•				•	•			3	3*	100%	A*	4*
Student 2	•	•			•	•			•	•			7.5	12	63%	D	2.5
Student 3	•	•	•	•	•	•	•	•	•	•	•		11	12	92%	A-	3.67
Student 4			•	•	•	•	•		•	•			IE	12			
Student 5	•	•	•	•	•	•							IE	12			
Student 6	•	•	•		•	•	•	•	•	•	•	•	11	12	92%	A-	3.67

Student 3 – 92%

Next Generation Science Standards (NGSS)		
Subject Area: Science	Strand: Matter and Its Interactions	Grade: 5
<b>Performance Expectation: 5-PS1-1</b> Students can develop a model to describe that matter is made of particles too small to be seen		<b>Guiding Unit Question:</b> How do we know that something exists if we cannot see it?
<b>Unit Vocabulary (Content):</b> properties, structures, scale, proportion, quantity, models, particles, bulk matter,		<b>Unit Vocabulary (Skills):</b> make, observe



Foundations	Student Friendly Language	Access Point	Essential	Confident	Extend
<b>Science &amp; Engineering Practices</b>	I can make a model to help me understand an idea by:	following/ participating in creating a model	planning and creating a model	creating a model to solve a problem	Adjusting or revising a model I have created
<b>Disciplinary Core Ideas</b>	I know that matter is made up of particles that are too small to see by:  I know that models can help us see particles that are too small to see by:	describing what matter is  describing that there are different states of matter  describing examples of different kinds of matter in the world	describing what bulk matter is  describing that matter (that I can see) is made up of tiny particles (that are too small to see)  describing examples of models that help to observe particles that are too small to see	describing how collecting many tiny particles can help us observe how matter takes up space  describing which part of the model is bulk matter, and which part of the model is particles	describing the relationship between matter and particles  using the model to describe the relationship between matter and how particles move when they are collected
<b>Crosscutting Concepts</b>	I know that objects in the world can be very large and very small by:	describing objects in the world that are very small and very large	describing what microscopic and macroscopic is and examples of each in the world	describing what is similar and what is different between microscopic and macroscopic objects in the world	describing what scale is and how it helps us understand microscopic and macroscopic objects

**\*Description: can include but are not limited to written, oral, pictorial, and kinesthetic**

Standards Based Grade Book (NGSS)																	
Learning Standard/ Performance Expectation	5-PS1-1. Develop a <b>model</b> to describe that <b>matter</b> is made of <b>particles</b> too small to be seen												Evaluation				
	Science and Engineering Practices				Disciplinary Core Ideas				Crosscutting Concepts								
Possible Evidence of Learning																	
Reporting Language	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending					
Evaluation	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4	Total	Out of	%	Letter Grade	4-Point
Student 1 (IEP)	•				•				•	•			3	3*	100%	A*	4*
Student 2	•	•			•	•			•	•			7.5	12	63%	D	2.5
Student 3	•	•	•	•	•	•	•	•	•	•	•		11	12	92%	A-	3.67
Student 4			•	•	•	•	•		•	•			IE	12			
Student 5	•	•	•	•	•	•							IE	12			
Student 6	•	•	•		•	•	•	•	•	•	•	•	11	12	92%	A-	3.67

Student 4 – IE

Next Generation Science Standards (NGSS)		
Subject Area: Science	Strand: Matter and Its Interactions	Grade: 5
Performance Expectation: 5-PS1-1 Students can develop a model to describe that matter is made of particles too small to be seen		Guiding Unit Question: How do we know that something exists if we cannot see it?
Unit Vocabulary (Content): properties, structures, scale, proportion, quantity, models, particles, bulk matter,		Unit Vocabulary (Skills): make, observe



Foundations	Student Friendly Language	Access Point	Essential	Confident	Extend
Science & Engineering Practices	I can make a model to help me understand an idea by:	following/ participating in creating a model	planning and creating a model	creating a model to solve a problem	Adjusting or revising a model I have created
Disciplinary Core Ideas	I know that matter is made up of particles that are too small to see by:  I know that models can help us see particles that are too small to see by:	describing what matter is  describing that there are different states of matter  describing examples of different kinds of matter in the world	describing what bulk matter is  describing that matter (that I can see) is made up of tiny particles (that are too small to see)  describing examples of models that help to observe particles that are too small to see	describing how collecting many tiny particles can help us observe how matter takes up space  describing which part of the model is bulk matter, and which part of the model is particles	describing the relationship between matter and particles  using the model to describe the relationship between matter and how particles move when they are collected
Crosscutting Concepts	I know that objects in the world can be very large and very small by:	describing objects in the world that are very small and very large	describing what microscopic and macroscopic is and examples of each in the world	describing what is similar and what is different between microscopic and macroscopic objects in the world	describing what scale is and how it helps us understand microscopic and macroscopic objects

Student 4 – with evidence  
9.5/12  
79%  
3.2

\*Description: can include but are not limited to written, oral, pictorial, and kinesthetic



Standards Based Grade Book (NGSS)																	
Learning Standard/ Performance Expectation	5-PS1-1. Develop a <b>model</b> to describe that <b>matter</b> is made of <b>particles</b> too small to be seen												Evaluation				
	Science and Engineering Practices				Disciplinary Core Ideas				Crosscutting Concepts				Total	Out of	%	Letter Grade	4-Point
Possible Evidence of Learning																	
Reporting Language	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending	Approaching/ Access Point	Emerging/ Essential	Developing	Extending					
Evaluation	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4	IE/IEP	2.5	3	4		12			
Student 1 (IEP)	•				•				•	•			3	3*	100%	A*	4*
Student 2	•	•			•	•			•	•			7.5	12	63%	D	2.5
Student 3	•	•	•	•	•	•	•	•	•	•	•		11	12	92%	A-	3.67
Student 4			•	•	•	•	•		•	•			IE	12			
Student 5	•	•	•	•	•	•							IE	12			
Student 6	•	•	•		•	•	•	•	•	•	•	•	11	12	92%	A-	3.67

Student 5 – IE

Next Generation Science Standards (NGSS)		
Subject Area: Science	Strand: Matter and Its Interactions	Grade: 5
Performance Expectation: 5-PS1-1 Students can develop a model to describe that matter is made of particles too small to be seen		Guiding Unit Question: How do we know that something exists if we cannot see it?
Unit Vocabulary (Content): properties, structures, scale, proportion, quantity, models, particles, bulk matter,		Unit Vocabulary (Skills): make, observe



Foundations	Student Friendly Language	Access Point	Essential	Confident	Extend
Science & Engineering Practices	I can make a model to help me understand an idea by:	following/ participating in creating a model	planning and creating a model	creating a model to solve a problem	Adjusting or revising a model I have created
Disciplinary Core Ideas	I know that matter is made up of particles that are too small to see by:  I know that models can help us see particles that are too small to see by:	describing what matter is  describing that there are different states of matter  describing examples of different kinds of matter in the world	describing what bulk matter is  describing that matter (that I can see) is made up of tiny particles (that are too small to see)  describing examples of models that help to observe particles that are too small to see	describing how collecting many tiny particles can help us observe how matter takes up space  describing which part of the model is bulk matter, and which part of the model is particles	describing the relationship between matter and particles  using the model to describe the relationship between matter and how particles move when they are collected
Crosscutting Concepts	I know that objects in the world can be very large and very small by:	describing objects in the world that are very small and very large	describing what microscopic and macroscopic is and examples of each in the world	describing what is similar and what is different between microscopic and macroscopic objects in the world	describing what scale is and how it helps us understand microscopic and macroscopic objects

Student 5 – with evidence  
9/12  
75%  
3.0

\*Description: can include but are not limited to written, oral, pictorial, and kinesthetic



**What is one useful idea?**

**What is one thing you want to try?**

**What is one thing you want to think about?**

**What is one thing you want to learn more about?**

**What is one thing you want to share with someone  
who is not here today?**

# Shelley MOORE PH.D.



@tweetsomemoore



@fivemooreminutes



@fivemooreminutes



[www.fivemooreminutes.com](http://www.fivemooreminutes.com)

[www.blogsomemoore.com](http://www.blogsomemoore.com)