

Once a pretest has been given teachers can utilize classroom activities and CFA's (in addition to DFA's and the Post-test) to evaluate a student's current level of proficiency. Yellow indicates that there should be a score for that standard on the corresponding quarters report card.

Waynesville R-VI
Science Scope and Sequence 2021-2022

Kindergarten

		1st Quarter		2nd Quarter	3rd Quarter	4th Quarter	
Elevate Science Topics		3	4	1	2	5	6
K.PS3.A.1	Sunlight	Post Answer Key					
K.ESS2.D.1	Weather		Post Recording Sheet				
K.PS2.A.1	Push & Pull			Post Answer Key			
K.PS1.A.1	Matter				Post Answer Key		
K.LS1.C.1	Needs of Living Things					Post Answer Key	
K.ESS3.C.1	Environment						Post Answer Key

[Standards Guide](#)

[Science Curriculum Feedback Form](#)

[K Science Item Specifications \(All\)](#)

K.PS3.A.1 Sunlight

Grade: K Subject: Science Pre: Quarter 1 Post: Quarter 1 Elevate Science Topic: 3

Standards

Report Card Topic	K.PS3.A.1	Sunlight	Expectation Unwrapped
Priority Standard	K.PS3.A.1	Make observations to determine the effect of sunlight on Earth's surface	<ul style="list-style-type: none"> Collect observational data using relative terms (e.g., warmer, hotter, colder, cooler, brighter, darker, lighter) on the effect of sunlight on Earth's surface.
Supporting Standards	K.PS3.B.1	With prompting and support, use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area (for example, use teacher-provided tools and materials to design and build a structure- such as an umbrella, canopy, or tent- that reduces the warming effect of the sun)	Listed on the item specification linked to the standard's code

**Click on standard code above to see Item Specifications from DESE and Released Items*

Instructional Ideas/Notes

		Instructional Ideas/Prerequisite Knowledge
Priority Standard	K.PS3.A.1	

K.PS3.A.1 Sunlight

Key Vocabulary

sunlight	surface	area	hot	rays
overexposure	observe	Earth	warmer	reduce
materials	structure	increase	protect	planet
warm	affect	cold	temperature	exposure
SPF	effect	cooler	colder	tools
design	warmth	shelter	harmful	

Common Assessments- Go to the Scope and Sequence

K.PS3.A.1 Sunlight

Proficiency Scale

Proficiency Scale: A score of 3.0 correlates with grade-level proficiency on the priority standard.

Score	Learning Goal	Sample Tasks
Score 4.0	<p>The student will:</p> <ul style="list-style-type: none"> On their own, successfully apply their understanding of energy conservation and energy transfer to a real world situation or problem 	<ul style="list-style-type: none"> How can you reduce the warming effect of sunlight on an area? Answers questions 1-5 correctly on the assessment.
3.5 In addition to 3.0 performance, in-depth inferences and applications with partial success.		
Score 3.0	<p>The student will:</p> <ul style="list-style-type: none"> Make observations to determine the effect of sunlight on Earth’s surface (for example, make relative observations- such as “warmer” and “cooler”- of the effect of sunlight on sand, soil, rocks, and water to make generalizations about the effect that sunlight has on Earth’s surface) 	<ul style="list-style-type: none"> How can sunlight affect the light and temperature on Earth’s surface? Correctly answer questions 1-4 on the assessment.
2.5 No major errors or gaps in 2.0 content and partial knowledge of 3.0 content.		
Score 2.0	<p>The student will</p> <ul style="list-style-type: none"> Recognize or recall specific vocabulary (lighter, darker, sun) 	<ul style="list-style-type: none"> Use vocabulary to identify the sun’s effect on Earth Answers question 1 correctly on the assessment.
1.5 Partial understanding of the 2.0 content with major errors or gaps in 3.0 content.		
Score 1.0	<ul style="list-style-type: none"> With help, a partial understanding of the 2.0 content and some of the 3.0 content. 	<ul style="list-style-type: none"> Cannot answer questions on the assessment correctly without help.

K.ESS2.D.1 Weather

Grade: K Subject: Science Pre: Quarter 1 Post: Quarter 1 Elevate Science Topic: 4

Standards

Report Card Topic	K.ESS2.D.1	Sunlight	Expectation Unwrapped
Priority Standard	K.ESS2.D.1	Use and share observations of local weather conditions to describe patterns over time	<ul style="list-style-type: none"> [Clarification Statement: Examples of qualitative observations could include descriptions of the weather (such as sunny, cloudy, rainy, and warm); examples of quantitative observations could include numbers of sunny, windy, and rainy days in a month. Examples of patterns could include that it is usually cooler in the morning than in the afternoon and the number of sunny days versus cloudy days in different months.]
Supporting Standards	K.ESS1.B.1	Make observations during different seasons to relate the amount of daylight to the time of the year	Listed on the item specification linked to the standard's code

**Click on standard code above to see Item Specifications from DESE and Released Items*

Instructional Ideas/Notes

		Instructional Ideas/Prerequisite Knowledge
Priority Standard	K.ESS2.D.1	

K.ESS2.D.1 Weather

Key Vocabulary

weather	sunlight	rainy	windy	predict
forecast	snowy	temperature	region	describe
observations	pattern	warm	cool	hot
cold	cloudy	increase	decrease	condition
Partly cloudy	sunny	amount	daylight	season
year	daily	Weather graph	predict	sunrise
sunset	movement	adapt	environment	

Common Assessments- Go to the Scope and Sequence

K.ESS2.D.1 Weather

Proficiency Scale

Proficiency Scale: A score of 3.0 correlates with grade-level proficiency on the priority standard.

Score	Learning Goal	Sample Tasks
Score 4.0	The student will: <ul style="list-style-type: none"> ● Describe how the weather conditions are affected by temperature. 	<ul style="list-style-type: none"> ● How does studying weather patterns help prepare us for daily life? ● Describe what happens to weather conditions when temperature changes. ● Answer questions 1-4 correctly on the assessment.
3.5 In addition to 3.0 performance, in-depth inferences and applications with partial success.		
Score 3.0	The student will: <ul style="list-style-type: none"> ● Make qualitative and quantitative observations of weather conditions by tallying the number of sunny, cloudy, or rainy days. 	<ul style="list-style-type: none"> ● Can look at a weather report and identify patterns ● Answer questions 1-3 correctly on the assessment.
2.5 No major errors or gaps in 2.0 content and partial knowledge of 3.0 content.		
Score 2.0	The student will <ul style="list-style-type: none"> ● Identify what a pattern is. 	<ul style="list-style-type: none"> ● Can identify a pattern in weather ● Answer question 1 on the assessment.
1.5 Partial understanding of the 2.0 content with major errors or gaps in 3.0 content.		
Score 1.0	<ul style="list-style-type: none"> ● With help, a partial understanding of the 2.0 content and some of the 3.0 content. 	<ul style="list-style-type: none"> ● Cannot answer questions on the assessment correctly without help.

K.PS2.A.1 Push Pull

Grade: K Subject: Science Pre: Quarter 2 Post: Quarter 2 Elevate Science Topic: 1

Standards

Report Card Topic	K.PS2.A.1	Push Pull	Expectation Unwrapped
Priority Standard	K.PS2.A.1	Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object	<ul style="list-style-type: none"> The student will, with guidance, plan and conduct an investigation in collaboration with peers. [Clarification Statement: Examples of pushes or pulls could include a string attached to an object being pulled, a person pushing an object, a person stopping a rolling ball, and two objects colliding and pushing on each other.]
Supporting Standards	K.PS2.A.2	Describe ways to change the motion of an object (i.e. how to cause an object to go slower, go faster, go further, change direction, stop)	Listed on the item specification linked to the standard's code
	K.ETS1.C.1	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs (for example, make observations to determine whether using a ramp can help a ball travel a certain distance or whether using curved structures can cause a marble to turn and follow a particular path)	Listed on the item specification linked to the standard's code

*Click on standard code above to see Item Specifications from DESE and Released Items

Instructional Ideas/Notes

		Instructional Ideas/Prerequisite Knowledge
Priority Standard	K.PS2.A.1	

K.PS2.A.1 Push Pull

Key Vocabulary

push	pull	motion	position	speed
force	direction	increase	decrease	greater
less	collide	strength	problem	solution
plan	conduct	investigation	compare	effects
test	slower	faster	further	weakness
perform	ramp	structure	path	interact
data	Stop compine	combine	same	Opposite
gravity	affect	pattern	exert	cause
object	balanced			

Common Assessments- Go to the Scope and Sequence

K.PS2.A.1 Push Pull

Proficiency Scale

Proficiency Scale: A score of 3.0 correlates with grade-level proficiency on the priority standard.

Score	Learning Goal	Sample Tasks
Score 4.0	The student will: <ul style="list-style-type: none"> On their own, successfully apply their understanding of forces and interactions to a real world situation or problem. 	<ul style="list-style-type: none"> Using experiment below the student will demonstrate their understanding of forces and interactions by changing the force of motion. (example: make the object go faster? Go slower?)
3.5 In addition to 3.0 performance, in-depth inferences and applications with partial success.		
Score 3.0	The student will: <ul style="list-style-type: none"> Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object 	<ul style="list-style-type: none"> Uppercase and lowercase letter writing assessment.
<ul style="list-style-type: none"> 2.5 No major errors or gaps in 2.0 content and partial knowledge of 3.0 content. 		
Score 2.0	The student will Recognize or recall specific vocabulary (for example, collide, compare, different, direction, motion, pull, push, stop, strength, change, circular motion, curved, distance, path, ramp, speed, straight-line motion, turn, zigzag motion), demonstrate a push, demonstrate a pull, describe the speed and direction of an object <ul style="list-style-type: none"> Answer questions 1-3 from Pearson Realize eText. 	<ul style="list-style-type: none"> Use vocabulary to identify pictures that demonstrate push and pull.
<ul style="list-style-type: none"> 1.5 Partial understanding of the 2.0 content with major errors or gaps in 3.0 content. 		
Score 1.0	<ul style="list-style-type: none"> With help, a partial understanding of the 2.0 content and some of the 3.0 content. 	<ul style="list-style-type: none"> Cannot answer questions on the assessment correctly without help.

K.PS1.A.1 Matter

Grade: K Subject: Science Pre: Quarter 3 Post: Quarter 3 Elevate Science Topic: 2

Standards

Report Card Topic	K.PS1.A.1	Matter	Expectation Unwrapped
Priority Standard	K.PS1.A.1	Make qualitative observations of the physical properties of objects (i.e. size, shape, color, mass)	<ul style="list-style-type: none"> Communicate observations based on size, shape, color, and mass of common objects .

*Click on standard code above to see Item Specifications from DESE and Released Items

Instructional Ideas/Notes

		Instructional Ideas/Prerequisite Knowledge
Priority Standard	K.PS1.A.1	

Key Vocabulary

matter	mass	volume	solid	liquid
gas	physical change	chemical change	senses	structure
properties	substance	observe	detect	object
compare	describe	identify		

Common Assessments- Go to the Scope and Sequence

K.PS1.A.1 Matter

Proficiency Scale

Proficiency Scale: A score of 3.0 correlates with grade-level proficiency on the priority standard.

Score	Learning Goal	Sample Tasks
Score 4.0	<p>The student will:</p> <ul style="list-style-type: none"> On their own, successfully apply their understanding of physical properties to a real world situation or problem 	<ul style="list-style-type: none"> Using the provided photo of a swimming pool, students can identify and label solid, liquid, gas.
<p>3.5 In addition to 3.0 performance, in-depth inferences and applications with partial success.</p>		
Score 3.0	<p>The student will:</p> <ul style="list-style-type: none"> Make qualitative observations of the physical properties of objects Recognize or recall specific vocabulary (color, shape, size, mass) 	<ul style="list-style-type: none"> Identify the physical property and structure of matter. (explain how objects are sorted: size, color, shape, mass)
<ul style="list-style-type: none"> 2.5 No major errors or gaps in 2.0 content and partial knowledge of 3.0 content. 		
Score 2.0	<p>The student will</p> <ul style="list-style-type: none"> Sort objects by different attributes (size, shape, color, mass) 	<ul style="list-style-type: none"> Sort given objects by different attributes (example: size, shape, color, mass)
<ul style="list-style-type: none"> 1.5 Partial understanding of the 2.0 content with major errors or gaps in 3.0 content. 		
Score 1.0	<ul style="list-style-type: none"> With help, a partial understanding of the 2.0 content and some of the 3.0 content. 	<ul style="list-style-type: none"> Cannot answer questions on the assessment correctly without help.

K.LS1.C.1 Needs of Living Things

Grade: K Subject: Science Pre: Quarter 4 Post: Quarter 4 Elevate Science Topic: 5

Standards

Report Card Topic	K.LS1.C.1	Needs of living Things	Expectation Unwrapped
Priority Standard	K.LS1.C.1	Use observations to describe patterns of what plants and animals (including humans) need to survive (for example, make observations of different ways in which plants and animals survive and identify patterns- such as animals needing food versus plants needing light, certain types of animals needing specific kinds of food, or all living things needing water)	<ul style="list-style-type: none"> [Clarification Statement: Examples of patterns could include that animals need to take in food but plants do not; the different kinds of food needed by different types of animals; the requirement of plants to have light; and, that all living things need water.]
Supporting Standards	K.ESS3.A.1	Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live (for example, use a model to show that living things need water, air, and resources from the land and that they live in places that have the things they need; for instance, deer eats buds and leaves and therefore usually live in forested areas, grasses need sunlight so they often grow in meadows, and so on)	Listed on the item specification linked to the standard's code
	K.ESS2.E.1	With prompting and support, construct an argument using evidence for how plants and animals (including but not limited to humans) can change the environment to meet their needs	Listed on the item specification linked to the standard's code

**Click on standard code above to see Item Specifications from DESE and Released Items*

Instructional Ideas/Notes

		Instructional Ideas/Prerequisite Knowledge
Priority Standard	K.LS1.C.1	

K.LS1.C.1 Needs of Living Things

Key Vocabulary

needs	depend	environment	living thing	plant
animal	model	represent	relationship	resources
air	land	change	affect	local area
life cycle	habitat	effect	identify pattern	describe

Common Assessments- Go to the Scope and Sequence

K.LS1.C.1 Needs of Living Things

Proficiency Scale

Proficiency Scale: A score of 3.0 correlates with grade-level proficiency on the priority standard.

Score	Learning Goal	Sample Tasks
Score 4.0	<p>The student will:</p> <ul style="list-style-type: none"> On their own, successfully apply their understanding of matter and energy in organisms to a real world situation or problem 	<ul style="list-style-type: none"> Correctly answers questions 1-5 on the assessment.
<p>3.5 In addition to 3.0 performance, in-depth inferences and applications with partial success.</p>		
Score 3.0	<p>The student will:</p> <ul style="list-style-type: none"> Use observations to describe patterns of what plants and animals (including humans) need to survive 	<ul style="list-style-type: none"> Correctly answers questions 1-4 on assessment
<ul style="list-style-type: none"> 2.5 No major errors or gaps in 2.0 content and partial knowledge of 3.0 content. 		
Score 2.0	<p>The student will</p> <ul style="list-style-type: none"> Recognize or recall specific vocabulary (for example, animal, food, human, light, living thing, pattern, plant, requirements for life, sunlight, survive, water), identify different things that animals and plants need to survive (such as sunlight, water, and food) 	<ul style="list-style-type: none"> Correctly answers 2 questions on assessment.
<ul style="list-style-type: none"> 1.5 Partial understanding of the 2.0 content with major errors or gaps in 3.0 content. 		
Score 1.0	<ul style="list-style-type: none"> With help, a partial understanding of the 2.0 content and some of the 3.0 content. 	<ul style="list-style-type: none"> Cannot answer questions on the assessment correctly without help.

K.ESS3.C.1 Environment

Grade: K Subject: Science Pre: Quarter 4 Post: Quarter 4 Elevate Science Topic: 6

Standards

Report Card Topic	K.ESS3.C.1	Environment	Expectation Unwrapped
Priority Standard	K.ESS3.C.1	Communicate solutions with others in oral and/or written forms, using models and/or drawings that provide detail about scientific ideas	<ul style="list-style-type: none"> Communicate solutions with others in oral and/or written forms, using models and/or drawings that provide detail about scientific ideas]
Supporting Standards	K.ETS1.A.1	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool	Listed on the item specification linked to the standard's code
	K.ETS1.B.1	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem	Listed on the item specification linked to the standard's code

**Click on standard code above to see Item Specifications from DESE and Released Items*

Instructional Ideas/Notes

		Instructional Ideas/Prerequisite Knowledge
Priority Standard	K.ESS3.C.1	

K.ESS3.C.1 Environment

Key Vocabulary

reduce	reuse	recycle	impact	land
water	air	natural resource	solution	communicate
humans	living things	local	environment	produce
effect	observe			

Common Assessments- Go to the Scope and Sequence

K.ESS3.C.1 Environment

Proficiency Scale

Proficiency Scale: A score of 3.0 correlates with grade-level proficiency on the priority standard.

Score	Learning Goal	Sample Tasks
<p>Score 4.0</p>	<p>The student will:</p> <ul style="list-style-type: none"> On their own, successfully apply their understanding of humans and Earth systems to a real world situation or problem 	<ul style="list-style-type: none"> Correctly answers questions 1-5 on the assessment. Question 5 possible responses: don't cut down trees, don't build big houses in places that will hurt the environment, don't litter, recycle.
<p>3.5 In addition to 3.0 performance, in-depth inferences and applications with partial success.</p>		
<p>Score 3.0</p>	<p>The student will:</p> <ul style="list-style-type: none"> Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment 	<ul style="list-style-type: none"> Correctly answers questions 1-4 on assessment
<ul style="list-style-type: none"> 2.5 No major errors or gaps in 2.0 content and partial knowledge of 3.0 content. 		
<p>Score 2.0</p>	<p>The student will</p> <ul style="list-style-type: none"> Recognize or recall specific vocabulary (for example, air, environment, human, impact, land, living thing, local, recycle, reduce, resource, reuse, water), identify ways humans have changed the environment, describe ways to reduce the impact of humans on the environment 	<ul style="list-style-type: none"> Correctly answers 2 questions on the assessment.
<ul style="list-style-type: none"> 1.5 Partial understanding of the 2.0 content with major errors or gaps in 3.0 content. 		
<p>Score 1.0</p>	<ul style="list-style-type: none"> With help, a partial understanding of the 2.0 content and some of the 3.0 content. 	<ul style="list-style-type: none"> Cannot answer questions on the assessment correctly without help.