



[Science]

Curriculum Unit Overview

[Grade 4 Science]

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Unit 1[The Scientific Method]

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Course Title: [Science]	Course Author: [April Elliott]	Grade Level(s): [4]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	Unit Number: [Type Here]	Created: [September 2021]	Revised: TBD
Standards Addressed: • [S4A.1.1] Identify and explain the application of scientific, environmental, or technological knowledge to possible solutions to problems • S4.A.1.1.1. Distinguish between a scientific fact and an opinion, providing clear explanations that connect observations and results.			

- **S4.A.1.3 Recognize and describe change in natural or human-made systems and the possible effects of those changes.**
- S4.A.1.3.1 Observe and record change by using time and measurement.
- S4.A.1.3.3 Observe and describe the change to objects caused by temperature change or light.
- **S4.A.2.1 .Apply skills necessary to conduct an experiment or design a solution to solve a problem..**
- S4.A.2.1.2 Design and describe an investigation to test one variable
- S4.A.2.1.3 Observe a natural phenomenon, record observations, and then make a prediction based on those observations.
- S4.A.2.1.4 State a conclusion that is consistent with the information/data.
- S4.A.2.2 Identify appropriate instruments for a specific task and describe the information the instrument can provide.

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

1. Identify the steps in the scientific method.
2. Learn how scientists form and test a hypothesis.

Transfer

Students will be able to independently use their learning to...

1. Understand the steps used in the Scientific Method to complete an experiment/Design and conduct a controlled experiment
2. Make a hypothesis and collect and organize data.
3. Test their hypothesis using the Scientific Method and interpret data.
4. Outcomes of an experiment can be predicted based on previously collected data. Data from the experiment can be presented in a variety of formats.

Meaning

UNDERSTANDINGS

Students will understand that...

Scientists have used the Scientific Method in a variety of settings. (textbook examples)

Predictions and inferences can be made on data already collected in experiments and personal experiences

The Scientific method includes six steps in the correct order for a successful conclusion/experiment.

ESSENTIAL QUESTIONS

What is the Scientific Method?

How is the Scientific Method used to gain knowledge?

Stage 1: Essential Content, Concepts & Skills *What do we want students to know and be able to do?* [Jump to Table of Contents](#)

Acquisition

KNOWLEDGE

Students will know...

Vocabulary meanings and skills- observe, form hypothesis, variables (independent and constant) data, prediction, experiment, conclusion

In a controlled experiment all variables are controlled except for one, allowing the experimenter to observe the effect of that one variable on the outcome.

Graphs and illustrations can be used to display results and visually see changes, looking for experimental errors, and making predictions

SKILLS

Students will be skilled at (be able to do)...

Using the scientific method to conduct investigations and build explanations: observing, communicating, comparing, organizing, relating
Identifying the independent and dependent variables/constants.
Successfully complete the banana experiment using the scientific method in chronological order.

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?

How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
1. [Vocabulary Quiz] 2. Sequence of Scientific Method	PERFORMANCE TASK(S)/Think GRASPS: 1. [Banana Experiment] 2. [Temperature and Pressure Chart]
1. [Type Here] 2. [Type Here]	OTHER EVIDENCE: 1. [Participation in class discussions] 2. [Completion of Observation Booklet]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?

This section provides a summary of the Key Learning Events and Instruction

Teachers may summarize the topics within lessons or may utilize [Laurel UbD Lesson Plan Template](#)

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Summary of Key Learning Events and Instruction

1. Introduce Vocabulary- Scientific Method, Variable, Hypothesis, Experiment, Control Variable/Constant, Independent Variable
2. Read Textbook pages 2-14

3. Review Scientific Tools (Colored Cards)
4. Science News Weekly- Investigating Science/It's Tool Time
5. Sink or Float Prediction Experiment (paper clip, straw, ping pong ball, cup, water)
6. Analyzing Data from a chart (Temperature and Pressure)
7. Writing Component- Write a paragraph Describing the experiment that James and Francesca completed their hypothesis : If a volcano has more chlorine, then it will be more explosive.... (Teacher created)
8. Scientific Method- Six steps in Chronological Order using YOUTUBE song- Scientific Method Rap
9. Teacher created Summative Assessment

The Great Banana Experiment

- A. Make an observation (What have you noticed about the lifespan of a banana?)
- B. Ask a Question: How can we keep our bananas fresh?
- C. Form a Hypothesis: If we store a _____, then _____.
- D. Make a prediction: I predict the banana _____ will stay the freshest.
- E. Do a test or experimentation: Banana 1, Banana 2, Banana 3, Banana 4
- F. Analyze Data: (Do a five day observation of all four bananas noting changing in color, texture, etc)
- G. Draw a Conclusion: After conducting the Great Banana Experiment and analyzing the data, we can conclude:

Following teacher created Summative Assessment students will enjoy a Banana Smoothie Ingredients: Lactaid, Plain Yogurt, Bananas, Sugar, Blender, Cups

Unit 2 How Seed Plants Reproduce

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Course Title: Science 4

Course Author: [Type Here]

Grade Level(s): 4

Time/Duration: [Type Here]

Course Summary: (optional) [Type Here]

Unit Name: How Seed Plants Reproduce

Unit Number: [Type Here]

Created: [Type Here]

Revised: TBD

Standards Addressed:

- [S4.B.1.1 Identify and describe similarities and differences between living things and their life processes.
- S4.B.1.1.1 Identify life processes of living things
- S4.B.1.1.3 Basic needs of plants and animals
- S4.B.1.1.4 Describe how different parts of a living thing work together to provide what the organism needs
- S4.B.1.1.5 Describe the life cycles of different organisms
- S4.B.2.1 Identify and explain how adaptations help organisms survive
- S4.B.2.2 Identify that characteristics are inherited and thus offspring closely resemble their parents.

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

Each part of the plant has a role in plant seed reproduction (pollen, stigma, stamen, ovary)
Pollination, fertilization, and germination are parts of plant seed reproduction.

Transfer

Students will be able to independently use their learning to...

5. Examine the parts of the plant
6. Explain how seed plants reproduce through fertilization, germination and pollination
7. Explain the life cycle of a flowering plant

Meaning

UNDERSTANDINGS

Students will understand that...

[Seed plants are classified]

[Seeds form ,grow, and reproduce]

[Plant seeds reproduce through pollination, fertilization, and germination]

ESSENTIAL QUESTIONS

[Why are pollinators essential to plants?]

[Why do plants have fruits and flowers?]

Which structures do all seed plants have in common?

What are some inherited traits in plants?

Why do offspring have traits that differ from those of their parents?

Stage 1: Essential Content, Concepts & Skills
What do we want students to know and be able to do?
[Jump to Table of Contents](#)

Acquisition

KNOWLEDGE
Students will know... The plant parts and their roles in reproduction Inherited traits in plants The three ways that plants reproduce without seeds or spores and the advantages
SKILLS
Students will be skilled at (be able to do)... Identify the parts of a plant Analyze the processes of fertilization, germination, and reproduction Examining reproduction through runners, cuttings, bulbs, and tubers

Stage 2: Assessments/Evidence of Learning <i>What are the formative (informal) and summative (formal) assessments used to measure learning and growth?</i> <i>How will you know that they did it?</i> Jump to Table of Contents	
Evaluative Criteria	Assessment Evidence
3. [Teacher created assessment Summative] 4. [Life Cycle of a Plant Chart Label and Illustrate]	PERFORMANCE TASK(S)/Think GRASPS: 3. [Pollination Lab Experiment] 4. [Photosynthesis Diagram]
3. [Type Here] 4. [Type Here]	OTHER EVIDENCE: 3. Extensive writing- teacher created] 4. [Sequence Chart- A Plant Grows 5. Flower Parts and Pollination Activity- Carson Delloso]

Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
This section provides a summary of the Key Learning Events and Instruction*

Teachers may summarize the topics within lessons or may utilize [Laurel UbD Lesson Plan Template](#)

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Summary of Key Learning Events and Instruction

10. []
11. [Type Here]
12. [Type Here]

Unit 3 [Exploring Ecosystems]

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Course Title Science 4	Course Author: April Elliott	Grade Level(s): [4]	Time/Duration:]
Course Summary: (optional) [Type Here]			
Unit Name: [Exploring Ecosystems]	Unit Number: [3]	Created: [Type Here]	Revised: TBD
Standards Addressed: ● S4.A.1.3. Recognize and describe change in natural or human made systems and the possible effects of those changes ● S4.A.1.3.5 Provide examples, predict, or describe how everyday human activities may change the environment ● S4.A.3.1 Identify systems and describe relationships among parts of a familiar system ● S4.3.1.2 Explain a relationship between the living and nonliving components in a system ● S4.3.1.3 Categorize the parts of an ecosystem as either living or nonliving and describe their roles in the system. ● S4.a.3.2 Use models to illustrate simple concepts and compare the models to what they represent ● S4.A.3.2.1 Identify what different models represent ● S4.B.1.1 Identify and describe similarities and differences between living things in their life processes ● S4.B.2.1 Identify and explain how adaptations help organisms survive			

- S4.B.3.1 Identify and describe living and nonliving things in the environment and their interaction.
- S4.B.3.2 Describe, explain, and predict change in natural or human made systems and the possible effects of those changes on the environment

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

[Where do plants and animals live and how do they depend on each other]

Living things depend on their habitat to meet their basic needs.

Aquatic, terrestrial and human made ecosystems consist of diverse living and non living components that change over time and across geographic areas.

The survival of living things is dependent upon their adaptations and ability to respond to natural changes and human influences on the environment.

The health of all living things is directly related to the environment.

Human activity and behaviors influence the environment.

Transfer

Students will be able to independently use their learning to...

1. [Students will be able to identify biotic and abiotic factors in an ecosystem]
2. [Describe ecosystems, communities and populations]
3. Define a biome
4. Describe Earth's six main biomes
5. Explain how energy is cycled through an ecosystem
6. Describe food webs and provide examples of predator and prey relationships

Living things depend on their habitat to meet their five basic needs

Aquatic, terrestrial and human- made ecosystems consist of diverse living and nonliving components that change over time

The survival of living things is dependent upon their adaptation and ability to respond to natural changes in and human influences on the environment

Meaning
UNDERSTANDINGS <i>Students will understand that...</i> - Biotic and Abiotic factors depend on each other for survival - Communities have different types of organisms - Populations and communities affect one another - Earth's land can be divided into six main biomes - Energy is cycled through an ecosystem - Food webs are the result of predator and prey relationships
ESSENTIAL QUESTIONS <i>Which type of living/ nonliving things make up an ecosystem?</i> <i>What are some similarities and difference between biomes?</i> <i>Why do communities have different types of organisms?</i> <i>How do populations and communities affect one another?</i> <i>Why do different organisms live in different places?</i> <i>How do we depend on living and nonliving things in our ecosystem?</i> <i>Which types of organisms are producers?</i> <i>How do consumers get energy?</i> <i>How does energy move through a food web? Which level of the energy pyramid supports the most organisms?</i>

Stage 1: Essential Content, Concepts & Skills
What do we want students to know and be able to do?

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Acquisition

KNOWLEDGE

Students will know...

Vocabulary meanings- biotic factor, abiotic factor, ecosystem, habitat, population, community, biome, grassland, deciduous forest, tropical rain forest, desert, taiga, tundra, producer, consumer, decomposer, food chain, food web, competition, energy pyramid

The relationship between abiotic and biotic factors.

Earth's land can be divided into six biomes.

Energy is passed from producers to consumers to decomposers in an ecosystem.

SKILLS

Students will be skilled at (be able to do)...

1. Identifying the biotic and abiotic factors
2. Define a biome and describe the six main Biomes of the Earth
3. Explain how energy is cycled through an ecosystem
4. Describe and analyze food webs and examples of predator and prey relationships
5. Define adaptation and examples of how adaptations help animals survive in their habitats
6. Describe ways in which plants respond to their environments and plant adaptations
7. Describe how living and nonliving things cause ecosystems to change and how they are dependent on one another
8. Understand the changes to an ecosystem that affect the living organisms

Living things depend on their habitat to meet their five basic needs

Aquatic, terrestrial and human- made ecosystems consist of diverse living and nonliving components that change over time

The survival of living things is dependent upon their adaptation and ability to respond to natural changes in and human influences on the environment

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?

How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
5. [Teacher created biotic/abiotic quiz] 6. [Teacher created Chapter test (multiple choice, true/false,essay)]	PERFORMANCE TASK(S)/Think GRASPS: 5. [Biome Box Diorama Project] 6. [Six paragraph Biome Essay with Rubric criteria and illustrations]
5. [Type Here] 6. [Type Here]	OTHER EVIDENCE: 6. [Food web creation template with labels] 7. [Type Here]

Stage 3: Learning Plan

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Summary of Key Learning Events and Instruction

13. [Vocabulary instruction]
14. [Textbook references pages 126-156]
15. [Youtube- Biome Song by Mr. Parr and minecraft video "This is my Biome"]
16. Science News Weekly- Ecosystems
17. What are the Parts of the Ecosystem- Core Skills Science Houghton Mifflin Harcourt Publishing
18. Biotic/Abiotic and Ecosystem ID and coloring
19. Visual Literacy- Read a photo Exploring Ecosystems
20. Food web template with Transfer of Energy
21. Biome Planning Sheet with Research/Planning Boxes to include Topic Sentence, Location, climate, soil/ground, biotic/abiotic, rainfall, adaptations and text evidence

Unit 4 **Shaping Earth**

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Course Title: Science 4	Course Author: April Elliott	Grade Level(s): 4	Time/Duration: 3 weeks
Course Summary: (optional) [Type Here]			
Unit Name: Shaping Earth	Unit Number: [Type Here]	Created: [Type Here]	Revised: TBD
Standards Addressed: ● S4.D.1.1 Describe basic landforms in Pennsylvania ● S4.D.2.1 Identify basic weather conditions and how they are measured ● S4.B.3.2 Describe explain and predict change in natural or human made systems and the possible side effects of those changes on the environment			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

The Earth consists of four parts- Crust, Mantle, Outer core, Inner core
The Earth's crust contains the continental crust and the oceanic crust.
Water Deposits contain drainage basins and river delts.
The movement of the Earth's crust create natural disasters.
Weathering, Erosion, and Deposition shape the Earth.

Transfer

Students will be able to independently use their learning to....

Meaning

UNDERSTANDINGS

Students will understand that...

The Earth consists of four parts- Crust, Mantle, Outer core, Inner core

The Earth's crust contains the continental crust and the oceanic crust.

Water Deposits contain drainage basins and river delts.

The movement of the Earth's crust create natural disasters.

Weathering, Erosion, and Deposition shape the Earth.

ESSENTIAL QUESTIONS

What four components make up the Earth?

How do Physical features/landforms form?

Explain the processes of Weathering, Erosion, and Deposition and how they cause the Earth to change?

Stage 1: Essential Content, Concepts & Skills
What do we want students to know and be able to do?
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Acquisition

KNOWLEDGE
Students will know... What four components make up the Earth? How do Physical features/landforms form? Explain the processes of Weathering, Erosion, and Deposition and how they cause the Earth to change? [Type Here] [Type Here]
SKILLS
Students will be skilled at (be able to do)... Identifying the four components of the Earth. Crust, mantle, outer core, inner core Understanding how the continental and oceanic crusts are transformed. Discussing the natural disasters and landforms - fault, plateau, fold, mountain, volcano, earthquake Describing the three processes of weathering, erosion, and deposition

Stage 2: Assessments/Evidence of Learning <i>What are the formative (informal) and summative (formal) assessments used to measure learning and growth?</i> <i>How will you know that they did it?</i> Jump to Table of Contents	
Evaluative Criteria	Assessment Evidence
7. Teacher created Vocabulary Quiz and Labeling of The Earth's Four Components, shelf, crusts, and slope 8. Readworks.ORG- Our Changing Earth- Plate Tectonics and Large Scale System Interactions	PERFORMANCE TASK(S)/Think GRASPS: 7. Assessment Writing- The Slow Process of Weathering, Erosion, and Deposition 8. Assessment Writing- The Quick Process of Natural Disasters
7. Plate Tectonics- Core Skills Science Harcourt 8. [Type Here]	OTHER EVIDENCE: 8. [Type Here] 9. [Type Here]

Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
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Summary of Key Learning Events and Instruction

- 22. Read and Understand using Textbook features and non-fiction supplemental materials
- 23. Use a variety of landform and topographic maps
- 24. Textbook reading and activities created by teacher

Weather and Climate

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Course Title: [Type Here]	Course Author: [Type Here]	Grade Level(s): [Type Here]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: Weather and CLimate	Unit Number: [Type Here]	Created: [Type Here]	Revised: TBD
Standards Addressed: ● S4.D.1.3 Describe Earth's different sources of water and describe changes in the form of water ● S4.D.2.1 Identify basic weather conditions and how they are measured ● S4.A.3.1 Identify systems and describe relationships among other parts of a familiar system			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

The Water Cycle

How Does the Water Cycle Affect Weather

Weather occurs in the atmosphere

Forms of precipitation

Types of clouds- cumulus, stratus, cirrus, cumulonimbus

[Type Here]

Transfer

Students will be able to independently use their learning to...

8. Identify the parts of the water cycle
9. Explain how the water cycle can affect weather
10. Atmosphere contains the weather (troposphere, stratosphere, mesosphere, thermosphere)
11. Describe the forms of precipitation- rain, snow, sleet, hail
12. Identify the four different types of clouds
13. Identify weather station tools- Thermometer, hygrometer, barometer, rain gauge, wind vane, anemometer
14. Explain the states of water- solid, liquid, frozen

Meaning

UNDERSTANDINGS

Students will understand that...

Define the atmosphere as a mixture of different gases

Describe the stages of the water cycle -precipitation, evaporation, transpiration, condensation

Weather can be forecasted by interpreting data on a weather map and utilizing patterns

The atmosphere has four main layers- Troposphere, stratosphere, mesosphere, thermosphere

The properties of weather are air temperature, humidity, air pressure, and precipitation (rain, snow, sleet, hail)

Water has three states- Solid, liquid, gas

ESSENTIAL QUESTIONS

What are the four levels of the atmosphere?

What are the properties of weather?

Compare/ Contrast the states of water

How does the water cycle evolve?

Stage 1: Essential Content, Concepts & Skills

What do we want students to know and be able to do?

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Acquisition

KNOWLEDGE

Students will know...

The four layers of the atmosphere

The properties of weather

The states of water

The stages of the water cycle

[Type Here]

SKILLS

Students will be skilled at (be able to do)...

Construct and use models to explain the natural phenomena make predictions and conduct investigations
Communicate through speaking, writing, or drawing predictions, observations, and conclusions
Describe the four properties of weather that can be measured and the tools used to measure them.
Sequence the steps of the water cycle
Explain how air masses form and identify the types of weather they cause
Con[Type Here]

Stage 2: Assessments/Evidence of Learning

*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?*

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Evaluative Criteria	Assessment Evidence
9. How does the Water Cycle affect the weather? 10. Weather- Patterns, Predictions, and Tools- Continental Press	PERFORMANCE TASK(S)/Think GRASPS: 9. Weather experiments 10. Predicting the Weather using Technology
9. [Type Here] 10. [Type Here]	OTHER EVIDENCE: 10. Weather- Anchors and Eligible Content- Continental Press 11. [Type Here]

Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?
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Summary of Key Learning Events and Instruction

- 25. Identify the parts of the water cycle
- 26. Explain how the water cycle can affect weather
- 27. Atmosphere contains the weather (troposphere, stratosphere, mesosphere, thermosphere)
- 28. Describe the forms of precipitation- rain, snow, sleet, hail
- 29. Identify the four different types of clouds
- 30. Identify weather station tools- Thermometer, hygrometer, barometer, rain gauge, wind vane, anemometer
- 31. Explain the states of water- solid, liquid, frozen

Unit 6 [Sun Earth and Moon]

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Course Title: Science 4	Course Author: [Type Here]	Grade Level(s): [Type Here]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: Sun, Earth, and Moon	Unit Number: 6	Created: [Type Here]	Revised: TBD
Standards Addressed: ● S4.A.3.2. Use models to illustrate simple concepts and compare the models to what they represent (sun-earth-moon system) ● S4.A.3.3 Identify and make observations about patterns that regularly occur and reoccur in nature (day, night, sunrise/sunset, lunar phases) ●			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

[Earth and Sun- Rotation(day/night) and Revolution (seasons)

Earth and Moon- Moon phases

Transfer

Students will be able to independently use their learning to...

15. Identify what causes day and night

16. Identify and explain revolution

17. Explain how the sun's apparent path changes over the seasons

18. Describe the phases of the moon and the solar and lunar eclipse

Meaning

UNDERSTANDINGS

Students will understand that...

Rotation creates day and night

Revolution creates the seasons

The phases of the moon create the solar and lunar eclipse

ESSENTIAL QUESTIONS

What is rotation/revolution

What are the phases of the moon and how are the solar and lunar eclipse created

[Type Here]

Stage 1: Essential Content, Concepts & Skills
What do we want students to know and be able to do?
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Acquisition

KNOWLEDGE

Students will know...

Rotation (the act of spinning) occurs every 24 hours.

Rotation creates day (12) and night (12).

The axis is at a 23.5 degree angle and is a real or imaginary line that an object spins around.

Orbit is the path revolving objects take. Earth's orbit is an ellipse (oval)

The apparent shapes of the moon take approximately 29 days to orbit the Earth.

A lunar eclipse occurs when the Earth is directly between the sun and the moon. The Earth casts a shadow on the moon.

When the moon is directly between the sun and the Earth, the moon casts a shadow on the sun known as the solar eclipse.

[Type Here]

SKILLS

Students will be skilled at (be able to do)...

Define rotation and revolution

Identify the phases of the moon

Distinguish between the lunar and solar eclipse

[Type Here]

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?
How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
11. Math Series- supplemental reading book titled DAY FOR NIGHT 12. PSSA Test prep- How do Earth and Its Moon Move- Core Science Skills Grade 4	PERFORMANCE TASK(S)/Think GRASPS: 11. Earth's Rotation and Revolution Guide 12. Learning the Moon Phases- use page 372 textbook 13. The Sun and Seasons- Earth Science
11. What is an eclipse (transparency) 12. Science Studies Weekly- Earth's Place in the Universe	OTHER EVIDENCE: 12. Globe and Flashlight with partner activity 13. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?

This section provides a summary of the Key Learning Events and Instruction

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Summary of Key Learning Events and Instruction

- 32. Rotation and Revolution
- 33. Moon Phases

Unit 7 **[Electricity]**

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Course Title: [Science 4]	Course Author: [Type Here]	Grade Level(s): [Type Here]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Electricity]	Unit Number: [Type Here]	Created: [Type Here]	Revised: TBD
Standards Addressed: S4.C.2.1 Recognize basic energy types and sources or describe how energy can be changed from one form to another			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

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Big Ideas:

Magnets and electricity produce related forces

Forces can attract or repel objects

Electric charges flowing through a wire can produce a measurable force on magnets and other objects

To determine whether an object is a conductor or an insulator , test and build simple circuits

Electricity and Energy: Building Circuits

Transfer

Students will be able to independently use their learning to...

19. Discover that opposite poles attract
20. Determine positive and negative charges
21. Test insulators and Conductors
22. Build circuits

23. The difference between series and parallel circuits

Meaning

UNDERSTANDINGS

Students will understand that...

Magnets and Electricity have similarities and difference

Series and Parallel Circuits create electricity

[Type Here]

[Type Here]

ESSENTIAL QUESTIONS

How are magnets and electricity connected?

What are the differences between series and parallel circuits?

[Type Here]

Stage 1: Essential Content, Concepts & Skills
What do we want students to know and be able to do?
[Jump to Table of Contents](#)

Acquisition

KNOWLEDGE

Students will know...

[Type Here]
[Type Here]

SKILLS

Students will be skilled at (be able to do)...

Understanding the relationship between magnets and electricity
Building series and parallel circuits
Compare and Contrast series and parallel circuits

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?

How will you know that they did it?

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Evaluative Criteria	Assessment Evidence
13. Vocabulary 14. Electrical Diagrams	PERFORMANCE TASK(S)/Think GRASPS: 14. Build circuits using conductors, light bulbs, and wire (resistors) 15. Identify the parts of the light bulb
13. [Type Here] 14. [Type Here]	OTHER EVIDENCE: 14. [Type Here] 15. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?

This section provides a summary of the Key Learning Events and Instruction

Teachers may summarize the topics within lessons or may utilize [Laurel UbD Lesson Plan Template](#)

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Summary of Key Learning Events and Instruction

34. [Type Here]

35. [Type Here]

36. [Type Here]

Unit 8 [Type Name Here]

[Jump to Table of Contents](#)

Course Title: [Type Here]	Course Author: [Type Here]	Grade Level(s): [Type Here]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	Unit Number: [Type Here]	Created: [Type Here]	Revised: TBD
Standards Addressed: [Type Here]			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

[Jump to Table of Contents](#)

Big Ideas:
[Type Here]

Transfer

Students will be able to independently use their learning to...

24. [Type Here]

25. [Type Here]

Meaning

UNDERSTANDINGS

Students will understand that...

[Type Here]

[Type Here]

[Type Here]

ESSENTIAL QUESTIONS

[Type Here]

[Type Here]

Stage 1: Essential Content, Concepts & Skills
What do we want students to know and be able to do?
[Jump to Table of Contents](#)

Acquisition

KNOWLEDGE

Students will know...

[Type Here]
[Type Here]

SKILLS

Students will be skilled at (be able to do)...

[Type Here]
[Type Here]

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?

How will you know that they did it?

[Jump to Table of Contents](#)

Evaluative Criteria	Assessment Evidence
15. [Type Here] 16. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 16. [Type Here] 17. [Type Here]
15. [Type Here] 16. [Type Here]	OTHER EVIDENCE: 16. [Type Here] 17. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?

This section provides a summary of the Key Learning Events and Instruction

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Summary of Key Learning Events and Instruction

37. [Type Here]

38. [Type Here]

39. [Type Here]

Unit 9 [Type Name Here]

[Jump to Table of Contents](#)

Course Title: [Type Here]	Course Author: [Type Here]	Grade Level(s): [Type Here]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	Unit Number: [Type Here]	Created: [Type Here]	Revised: TBD
Standards Addressed: [Type Here]			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

[Jump to Table of Contents](#)

Big Ideas:

[Type Here]

Transfer

Students will be able to independently use their learning to...

26. [Type Here]

27. [Type Here]

Meaning

UNDERSTANDINGS

Students will understand that...

[Type Here]

[Type Here]

[Type Here]

ESSENTIAL QUESTIONS

[Type Here]

[Type Here]

Stage 1: Essential Content, Concepts & Skills
What do we want students to know and be able to do?
[Jump to Table of Contents](#)

Acquisition

KNOWLEDGE

Students will know...

[Type Here]
[Type Here]

SKILLS

Students will be skilled at (be able to do)...

[Type Here]
[Type Here]

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?

How will you know that they did it?

[Jump to Table of Contents](#)

Evaluative Criteria	Assessment Evidence
17. [Type Here] 18. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 18. [Type Here] 19. [Type Here]
17. [Type Here] 18. [Type Here]	OTHER EVIDENCE: 18. [Type Here] 19. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?

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Summary of Key Learning Events and Instruction

40. [Type Here]

41. [Type Here]

42. [Type Here]

Unit 10 [Type Name Here]

[Jump to Table of Contents](#)

Course Title: [Type Here]	Course Author: [Type Here]	Grade Level(s): [Type Here]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	Unit Number: [Type Here]	Created: [Type Here]	Revised: TBD
Standards Addressed: [Type Here]			

Stage 1 Desired Results: Enduring Understandings & Essential Questions

What are the overarching takeaways and big ideas for students?

[Jump to Table of Contents](#)

Big Ideas:
[Type Here]

Transfer
<i>Students will be able to independently use their learning to...</i> 28. [Type Here] 29. [Type Here]
Meaning
UNDERSTANDINGS <i>Students will understand that...</i> [Type Here] [Type Here] [Type Here]
ESSENTIAL QUESTIONS [Type Here] [Type Here]

Stage 1: Essential Content, Concepts & Skills
What do we want students to know and be able to do?
[Jump to Table of Contents](#)

Acquisition
KNOWLEDGE
Students will know...

[Type Here]
[Type Here]

SKILLS

Students will be skilled at (be able to do)...

[Type Here]
[Type Here]

Stage 2: Assessments/Evidence of Learning

What are the formative (informal) and summative (formal) assessments used to measure learning and growth?

How will you know that they did it?

[Jump to Table of Contents](#)

Evaluative Criteria	Assessment Evidence
19. [Type Here] 20. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 20. [Type Here] 21. [Type Here]
19. [Type Here] 20. [Type Here]	OTHER EVIDENCE: 20. [Type Here] 21. [Type Here]

Stage 3: Learning Plan

What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?

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Summary of Key Learning Events and Instruction

43. [Type Here]

44. [Type Here]

45. [Type Here]