

Requirements:

- ❖ Unit Overview
 - Objectives:
 - At least three to five unit objectives
 - Each based on a different level of Bloom's Taxonomy
 - Identify:
 - Indiana standards
 - Grade level
 - Source citation (if applicable)
 - Table of Alignments
- ❖ Pre-assessment
 - Assessment of prior knowledge
 - Assessment of student interest
- ❖ Objective Summative/Unit Test
 - A complete and formatted to print unit test with:
 - Selected response items
 - Constructed response items
- ❖ Performance Assessment
 - Full description of the project (goal, student roles, final product, etc.) including any materials used
 - Rubric
- ❖ Reflection and Peer Review (only submitted for final review, no draft necessary)
 - 1-2 paragraphs
 - What did you learn? What do you want to remember from this project?

Unit Title: Earth's Physical Systems

Established Learning Objectives:

- *Identify and describe* physical features of local community including home, school, and neighborhood.
 - Aligns with First Grade Social Studies Standard 1.3.4
- *Define and explain* weather, temperature, climate, precipitation, and cloud coverage.
 - Aligns with First Grade Social Studies Standard 1.3.5
- *Explain* characteristics of the four seasons: summer, fall, winter, spring.
 - Aligns with First Grade Social Studies Standard 1.3.6
- *Explain* weather patterns in the community, including temperature, precipitation, cloud coverage, and the amount of sunlight during the different seasons of the year.
 - Aligns with First Grade Social Studies Standard 1.3.5
 - Aligns with Second Grade Science Standard 2.2.4
- *Explain* the effects of seasonal change on plants, animals, and people.
 - Aligns with First Grade Social Studies Standard 1.3.6

Established State Standards:

First Grade Social Studies

- 1.3.4 Identify and describe physical features* of the local community including home, school and neighborhood.
 - *Physical Features: geographic features that occur in nature, such as land and water forms, natural vegetation and wildlife
- 1.3.5 Summarize weather patterns in the community, including temperature, precipitation, cloud coverage, and the amount of sunlight during the different seasons of the year.
- 1.3.6 Explain the effect of seasonal change on plants, animals, and people.

Second Grade Science

- 2.2.4 Ask questions about charted observations and graphed data. Identify the day-to-day patterns and cycles of weather. Understand seasonal time scales in terms of temperature and amounts of rainfall and snowfall.

Table of Alignment		
Objective	Standard	Test Item(s)/Rubric Rows
<i>Identify and describe</i> physical features of local community including home, school, and neighborhood.	First Grade Social Studies Standard 1.3.4	Pre-Test Items: 10 Post-Test Items: 3, 8-12
<i>Define and explain</i> weather, temperature, climate, precipitation, and cloud coverage.	First Grade Social Studies Standard 1.3.5	Pre-Test Items: 3-8 Post-Test Items: 4-7, 13-14, 21 Performance Assessment Rubric Row: 3
<i>Explain</i> characteristics of the four seasons: summer, fall, winter, spring.	First Grade Social Studies Standard 1.3.6	Pre-Test Items: 1-2 Post-Test Items: 2, 15 Performance Assessment Rubric Row: 1
<i>Explain</i> weather patterns in the community, including temperature, precipitation, cloud cover, and the amount of sunlight during the different seasons of the year.	First Grade Social Studies Standard 1.3.5 Second Grade Science Standard 2.2.4	Pre-Test Items: 9 Post-Test Items: 1, 16, 20, 21 Performance Assessment Rubric Row: 3
<i>Explain</i> the effects of seasonal change on plants, animals, and people.	First Grade Social Studies Standard 1.3.6	Pre-Test Items: 11-14 Post-Test Items: 17-19 Performance Assessment Rubric Row: 2

Pre-assessment

This pre-assessment is designed to help me organize our unit on **Earth's Physical Systems**. I am asking you to take your time, read each question carefully, and answer as honestly as possible. This pre-assessment is NOT going to be graded, so answering a question incorrectly does not count against you. You are NOT expected to know every answer.

Name: _____

Date: _____

Multiple-Choice

Directions: From the given choices, circle the correct answer for each question. Each question contains only one correct answer.

1. In the state of Indiana, do the different seasons of the year receive the same amount of sunlight?

- a. Yes.
- b. No.
- c. It depends on how cloudy it is.

2. What are the seasons in a year?

- a. Summer, Fall, Winter, Spring
- b. Summer, Harvest, Winter, Rainy
- c. Sunny, Harvest, Winter, Spring
- d. Sunny, Fall, Winter, Rainy

Matching

Directions: Match the terms on the left with the correct definition on the right by putting the correct letter in the blank. Each letter will only be used once.

_____ 3. Clouds

a. water falling in drops from vapor condensed in the atmosphere

_____ 4. Precipitation

b. large collection of very tiny droplets of water or ice crystals

_____ 5. Rain

c. a deposit on the earth of hail, mist, rain, sleet, or snow

Short Answer

Directions: In incomplete sentences, write your definition for each word on the lines provided.

6. Climate:

7. Weather:

8. Temperature:

Essay

Directions: In paragraph form, answer the following question on the lines provided.

9. Imagine you are in your favorite location in the world. In 3 to 6 complete sentences, tell me the name of your favorite location, and explain its weather and climate during the month of January.

Essay Scoring Key

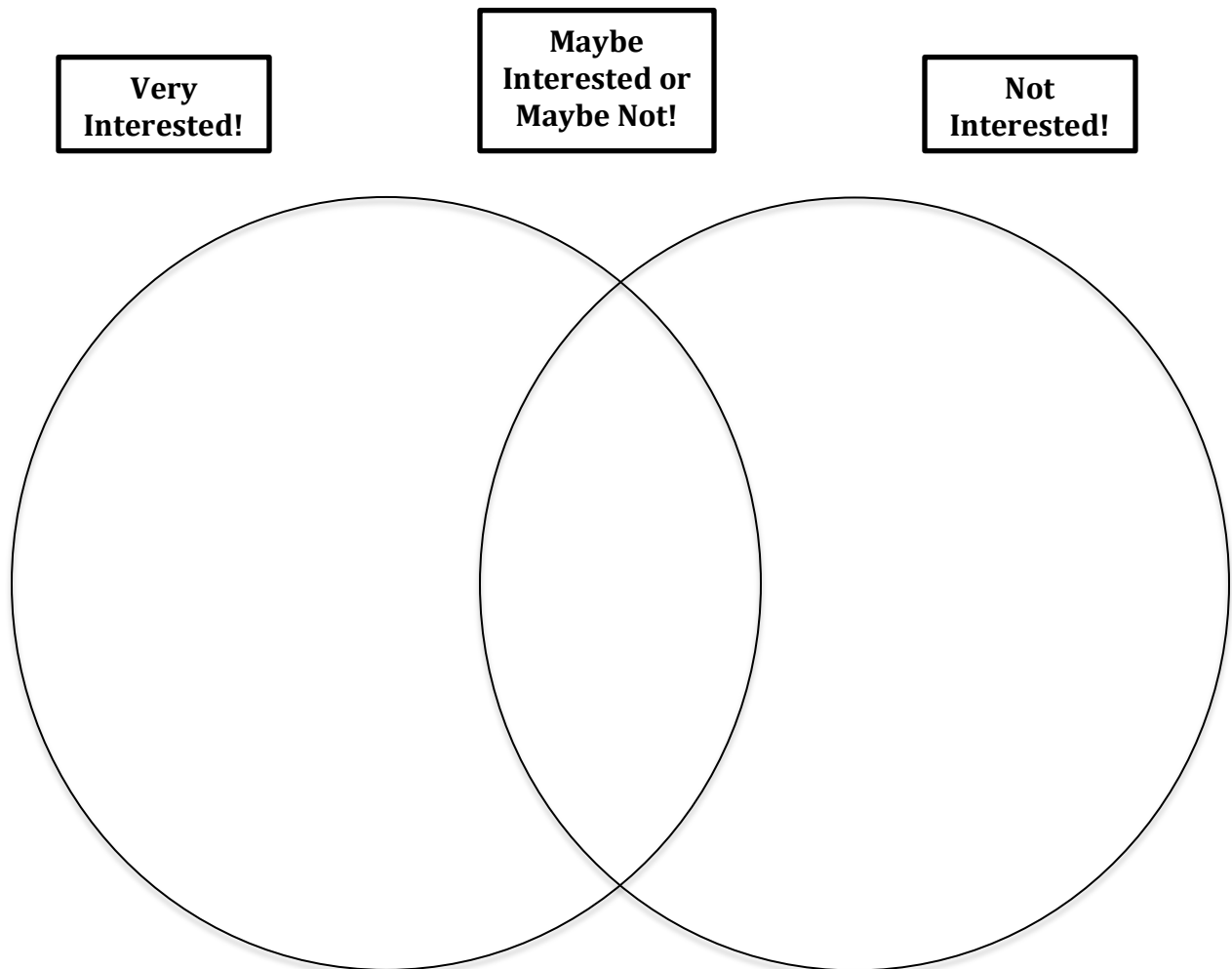
	No Answer 0 points	Needs Improvement 1 point	Adequate 3 points	Quality 5 points
Content 5 points (Degree to which content is discussed in detail)	Did not answer question.	*Answer is partial, incomplete, or inaccurate. Key points are unclear. Question not adequately answered. -Does not write in complete sentences. -Does not include at least 3 sentences. -Does not accurately explain climate and weather of location.	*Key points are addressed in 3 to 6 complete sentences, but are not well supported. -Accurately explains either the climate or weather of location.	*Answers are accurate and complete. Key points are stated and supported in 3 to 6 complete sentences. -Accurately explains both the climate and weather of location.
Writing Conventions 5 points (Degree to which spelling, punctuation, grammar, and complete sentences are used)	Did not answer question.	*Displays four or more errors in spelling, punctuation, grammar, and sentence structure. -Four errors minimum for all conventions combined.	*Displays two or three errors in spelling, punctuation, grammar, and sentence structure. -Two errors minimum and three errors maximum for all conventions combined.	*Displays one or zero errors in spelling, punctuation, grammar, and sentence structure. -One error maximum for all conventions combined.

Venn Diagram

Directions: For each physical feature of the community, write it in the appropriate section of the Venn Diagram.

10. How interested are you in learning about this physical feature of the environment?

- | | |
|--------------|---------------|
| a. Mountains | d. Tornado |
| b. Deserts | e. Earthquake |
| c. Volcanoes | f. Flood |



Fill-in-the-Blank

Directions: Write the correct answer in each of the blanks provided.

11. The majority of plants in our community _____ (die , survive) during Winter.
12. During Summer, we usually turn on the _____ (air , heat).
13. In Fall, it is fun to jump in a pile of _____ (snow , leaves).
14. When it is Spring, the _____ (animals , flowers) blossom.

Unit Test

Name: _____

Date: _____

Geography: Earth's Physical Systems

Multiple-Choice (Selected response, 3 points: 1 point each)

Directions: From the given choices, circle the correct answer for each question. Each question contains only one correct answer.

1. In the state of Indiana, which season typically receives the most amount of sunlight?

- a. Winter
- b. Fall
- c. Summer
- d. Spring

2. How many different seasons are in a year?

- a. 12
- b. 2
- c. 5
- d. 4

3. Which is an example of a physical feature of the environment?

- a. Pollution
- b. Tornado
- c. Wind
- d. Gravity

Matching (Selected response, 4 points: 1 point each)

Directions: Match the terms on the left with the correct definition on the right by writing the correct letter in the blank. Each letter will only be used once.

_____ 4. Climate

a. degree of hotness or coldness that can be measured using a thermometer, measured in degrees in Fahrenheit or Celsius

_____ 5. Weather

b. average weather conditions of a particular place over a long period of time

_____ 6. Temperature

c. deposit of hail, mist, rain, sleet, or snow on the earth

_____ 7. Precipitation

d. the day-to-day conditions of a particular place

Matching (Selected response, 5 points: 1 point each)

Directions: Match the terms on the left with the correct definition on the right by writing the correct letter in the blank. Each letter will only be used once.

- | | |
|----------------------|--|
| _____ 8. Tornado | a. shaking, rolling or sudden shock of the earth's surface, natural means of releasing stress |
| _____ 9. Mountain | b. mountain that opens downward to a pool of molten rock below Earth's surface, pressure builds up and eruptions occur |
| _____ 10. Earthquake | c. violent rotating column of air extending from a thunderstorm to the ground, capable of tremendous destruction with wind speeds of up to 300 mph |
| _____ 11. Flood | d. a land mass that projects well above its surroundings, higher than a hill |
| _____ 12. Volcano | e. results from days of heavy rain and/or melting snows, when rivers rise and go over their banks |

True/False (Binary choice, 3 points: 1 point each)

Directions: Fill in the blanks by writing the correct letter, "T" for true, or "F" for false.

- _____ 13. Rain is water falling in drops from vapor condensed in the atmosphere.
- _____ 14. Clouds are air moving from an area of high pressure to an area of low pressure.
- _____ 15. Summer, Fall, Winter, and Spring are the seasons in a year.

Fill-in-the-Blank (Constructed response, 4 points: 1 point each)

Directions: Fill in the blanks by writing the correct answers. There are no two exact answers.

16. List two temperatures in degrees Fahrenheit that are warmer than 32 degrees Fahrenheit. _____ and _____

17. In the _____ season, we usually rake leaves into a pile.

18. We receive the most snow accumulation in the _____ season.

19. During what season do we typically go swimming in pools? _____

Short Answer (Constructed response, 4 points)

Directions: In incomplete sentences, write your answer to the question on the lines provided.

20. Picture yourself sitting outside on a fall afternoon. In bulleted points, list four characteristics (things you may see, feel, hear) about Fall. Your answer should include weather patterns, such as precipitation, temperature, rainfall; and the environment.

Directions: In paragraph form, answer the following question(s) on the lines provided.

[illegible]

Essay Scoring Rubric

	No Answer 0 points	Needs Improvement 1 point	Adequate 3 points	Quality 5 points
Content 5 points (Degree to which content is discussed in detail)	Did not answer question.	*Answer is partial, incomplete, or inaccurate. Key points are unclear. Question not adequately answered. -Does not write in complete sentences. -Does not include at least 3 sentences. -Does not accurately explain difference between climate and weather.	*Key points are addressed in 3 to 6 complete sentences, but are not well supported. -Explains difference between climate and weather, but does not accurately compare weather and climate of a summer and winter day in Indiana.	*Answers are accurate and complete. Key points are stated and supported in 3 to 6 complete sentences. -Explains difference between climate and weather, and accurately compares weather and climate of a summer and winter day in Indiana.
Writing Conventions 5 points (Degree to which spelling, punctuation, grammar, and complete sentences are used)	Did not answer question.	*Displays four or more errors in spelling, punctuation, grammar, and sentence structure. -Four errors minimum for all conventions combined.	*Displays two or three errors in spelling, punctuation, grammar, and sentence structure. -Two errors minimum and three errors maximum for all conventions combined.	*Displays one or zero errors in spelling, punctuation, grammar, and sentence structure. -One error maximum for all conventions combined.

Sources:

<http://www.weatherwizkids.com/weather-volcano.htm>

<https://www.youtube.com/watch?v=D6yQ8-M8rmU>

Performance Assessment

Directions: For this project, you will research one of the four seasons (Summer, Fall, Winter, Spring). The class will be divided up into four groups - one for each season. Each group is to work together and research the main characteristics, activities, weather patterns, etc. for their assigned season. At the end of the project, your group will present your season and its information to the rest of the class.

Research of each season should include:

- Characteristics of season
- Common activities/events of season
- Weather patterns of season (temperature, rainfall, cloud coverage, etc.)

After your group conducts research, you may ask yourself the following:

- How are we going to present our research to the class?
 - Poster board, Video, PowerPoint
- Who is going to talk about the different components of the research?
 - Talking should be evenly distributed among group members

Note: Students will have access to resources in order to conduct their research. Students may choose to utilize the classroom and library computers, as well books located in the school library.

Group 1: Summer

-Students:

- Regan Rose
- Marshall Bledsoe
- Lindi Thomas
- Elizabeth Silvey
- Matthew Stuve

Group 2: Fall

-Students:

- Brooke Reeder
- Abigail Christianson
- Harlee Williams
- Katharine Otoloski
- Jenna Furgeson

Group 3: Winter

-Students:

- Grant Cox
- Chase Bly
- Taylor McKee
- David Jones
- Jesse Nelson

Group 4: Spring

-Students:

- Cheyenne Stant
- Lisa Earls
- Carlos Bogue
- Justin Ashby
- Lucas Snider

Note: This performance assessment is designed to address real life skills that relate directly to informative speaking, conducting research, and group cooperation and collaboration.

Performance Assessment Scoring Rubric

	Excellent (5 points)	Developing (3 points)	Needs Improvement (1 point)	Row Total (30 points possible)
Discussion of characteristics of season	All major characteristics are accurately and thoroughly discussed	The majority of characteristics are accurately and thoroughly discussed, few key characteristics missing	Few to zero characteristics are discussed, characteristics are inaccurate and not thorough	
Discussion of common activities/events of season	All major activities/events are accurately and thoroughly discussed	The majority of activities/events are accurately and thoroughly discussed, few key activities/events missing	Few to zero activities/events are discussed, activities/events are inaccurate and not thorough	
Discussion of weather patterns of season (temperature, rainfall, cloud coverage, etc.)	All major weather patterns are accurately and thoroughly discussed	The majority of weather patterns are accurately and thoroughly discussed, few key weather patterns missing	Few to zero weather patterns are discussed, weather patterns are inaccurate and not thorough	
Means and format of presentations	Effective implementation of presentation, used an appropriate delivery method	Acceptable implementation of presentation, used an acceptable delivery method	Ineffective implementation of presentation, did not use an acceptable delivery method	
Presentation skills	All three are appropriate and effective: speaking voice, posture, and eye contact	Only two of three are appropriate and effective: speaking voice, posture, or eye contact	Zero are appropriate and effective: speaking voice, posture, and eye contact	
Group Contribution and Collaboration	Student fully participated and pulled adequate weight in developing the project	Student either partially participated or pulled partial weight in developing the project	Student minimally participated and pulled inadequate weight in developing the project	
Rubric Total =				___ out of 30

Reflection

I have learned a great amount of information relating to assessment and pre-planning instruction by completing this Assessment Unit. A significant amount of time and effort was required in order for me to successfully complete the multiple components of this project. However, as a teacher, this type of work is what I will be doing each day in my career, so it is important that I learn and understand the skills necessary to successfully assess and plan instruction. I found it quite interesting, yet challenging, to discover material and assessments that related to the specific standards and learning objectives I selected. It is my job to provide my students with instruction that maximizes their learning capabilities and enhances their overall educational journey, and I believe that through effective and appropriate unit planning, I will have increased opportunities of meeting these needs of my students. When I have my own classroom in the future, I will need to remember how much time and effort was required in order to successfully create an entire unit assessment.