Zoe's Spring Weather Adventure Worksheet

Grade 3 science spring

Students will be able to observe, describe, and explain weather patterns across seasons, using spring as a model for data collection and scientific reasoning.

Name: _____ Date: _____

1. Zoe steps outside on a spring morning. She feels warm air and sees bright sunshine. Circle the best word: Spring weather is usually WARMER / COLDER than winter weather.

2. Zoe looks at the sky. She sees big white clouds. True or False: Clouds are made of tiny drops of water.

3. Zoe finds a special weather log in the park. It shows spring weather symbols. Fill in the blank: Rain in spring helps plants grow because rain brings _____ to the soil.

4. Zoe reads the weather log. Monday was sunny. Tuesday was rainy. Wednesday was cloudy. What weather pattern does Zoe notice? Explain using one sentence.

5. Zoe's weather log shows more rain in spring than in winter. Why does spring get more rain? Circle the best reason: (A) The sun warms air and water, making more clouds. (B) The wind blows rain from space. (C) Rain only falls in spring.

6. Zoe discovers a rare find — a hidden weather journal from 1910. It recorded spring temperatures for one week: 55°F, 58°F, 54°F, 60°F, 57°F. Zoe says spring temperatures stay close together. Is Zoe correct? Explain why using weather science words.

7. Zoe finds a unique item — an old rain gauge buried under a tree. It shows spring gets about 4 inches of rain per month. Winter gets about 1 inch per month. Zoe makes a hypothesis. Write Zoe's hypothesis: If it is spring, then there will be _____ rain than in winter, because _____.

8. Zoe completes her spring weather adventure. She found the hidden treasure — a scientist's notebook full of seasonal weather data. It shows four seasons: spring, summer, fall, winter. Each season has different temperatures and rainfall. Zoe writes a conclusion in the notebook. Help Zoe finish it: 'I learned that weather changes with the seasons because _____. Spring is special because _____. Scientists track weather data to _____.' Use science words you learned today.

Answer Key: Zoe's Spring Weather Adventure Worksheet

GRADE 3 | TEACHER & PARENT USE ONLY

Before starting, display a class weather chart and ask students which weather symbols from Q3 and Q5 they have seen this week in real life. This grounds Zoe's adventure in observable spring data students can connect to personally.

1. Zoe steps outside on a spring morning. She feels warm air and sees bright sunshine. Circle the best word: Spring weather is usually WARMER / COLDER than winter weather.

Answer: Q1: Zoe notices warmth replacing winter cold. Spring comes after winter on Earth's seasonal cycle. As Earth tilts toward the sun, temperatures rise. Answer: WARMER. Spring temperatures are warmer than winter temperatures.

2. Zoe looks at the sky. She sees big white clouds. True or False: Clouds are made of tiny drops of water.

Answer: Q2: Clouds form when water vapor in the air cools and condenses into tiny liquid water droplets or ice crystals. This is a core water-cycle fact for Grade 3. Answer: TRUE. Clouds are made of tiny drops of water.

3. Zoe finds a special weather log in the park. It shows spring weather symbols. Fill in the blank: Rain in spring helps plants grow because rain brings _____ to the soil.

Answer: Q3: Plants need water, sunlight, and nutrients to grow. Rain delivers water directly to soil. Spring rain is a key seasonal pattern tied to NGSS.3-ESS2-1 weather observation. Answer: WATER. Rain brings water to the soil, which plants need to grow.

4. Zoe reads the weather log. Monday was sunny. Tuesday was rainy. Wednesday was cloudy. What weather pattern does Zoe notice? Explain using one sentence.

Answer: Q4: NGSS.3-ESS2-1 requires students to represent and analyze weather data. Zoe is identifying that spring weather changes from day to day — this is the concept of weather variability. Sample answer: Zoe notices that spring weather changes every day, switching between sunny, rainy, and cloudy.

5. Zoe's weather log shows more rain in spring than in winter. Why does spring get more rain? Circle the best reason: (A) The sun warms air and water, making more clouds. (B) The wind blows rain from space. (C) Rain only falls in spring.

Answer: Q5: In spring, rising temperatures cause more evaporation from oceans, lakes, and soil. Warmer air holds more water vapor, which rises, cools, and forms rain clouds. This is the water cycle driving seasonal precipitation. Answer: (A) The sun warms air and water, making more clouds. This increased evaporation leads to more rain in spring.

6. Zoe discovers a rare find — a hidden weather journal from 1910. It recorded spring temperatures for one week: 55°F, 58°F, 54°F, 60°F, 57°F. Zoe says spring temperatures stay close together. Is Zoe correct? Explain why using weather science words.

Answer: Q6: The five temperatures are 55, 58, 54, 60, and 57 degrees Fahrenheit. The lowest is 54°F and the highest is 60°F. The range is 60 minus 54 equals 6 degrees. A 6-degree range means the values are close together. In science, this shows that spring temperatures are relatively stable within a week, though they vary day to day. This connects to NGSS.3-ESS2-1 data patterns. Answer: Yes, Zoe is correct. The temperatures range from 54°F to 60°F, a difference of only 6 degrees. This shows spring temperatures stay close together within a week.

7. Zoe finds a unique item — an old rain gauge buried under a tree. It shows spring gets about 4 inches of rain per month. Winter gets about 1 inch per month. Zoe makes a hypothesis. Write Zoe's hypothesis: If it is spring, then there will be _____ rain than in winter, because _____.

Answer: Q7: A hypothesis is an if-then statement based on prior observations. The rain gauge data shows spring (4 inches) gets more rain than winter (1 inch). The scientific reason is that warmer spring temperatures increase evaporation and water vapor in the air, leading to more precipitation. Answer: If it is spring, then there will be MORE rain than in winter, because warmer temperatures cause more water to evaporate and form rain clouds. (Accept reasonable scientific explanations referencing warmth, evaporation, or the water cycle.)

8. Zoe completes her spring weather adventure. She found the hidden treasure — a scientist's notebook full of seasonal weather data. It shows four seasons: spring, summer, fall, winter. Each season has different temperatures and rainfall. Zoe writes a conclusion in the notebook. Help Zoe finish it: 'I learned that weather changes with the seasons because _____. Spring is special because _____. Scientists track weather data to _____.' Use science words you learned today.

Answer: Q8: This extension question asks students to synthesize the full adventure using NGSS.3-ESS2-1 concepts: seasonal weather patterns, data collection, and scientific explanation. Narrative closure — Zoe completes her mission by writing a scientific conclusion in the hidden treasure notebook. Sample answer: 'I learned that weather changes with the seasons because Earth tilts toward or away from the sun, changing how much heat reaches us. Spring is special because temperatures warm up and rainfall increases, helping plants grow after winter. Scientists track weather data to find patterns and understand how seasons change over time.' Accept any scientifically accurate responses that reference seasonal change, spring characteristics, and the purpose of weather observation.