Zoe's Spring Garden Plant Life Cycle Adventure

Grade 2 science spring garden

Students will be able to identify and describe each stage of the plant life cycle using observations from a spring garden.

Name: _____ Date: _____

1. Zoe finds a tiny seed. A seed is the first stage. Circle the right word. A seed comes _____ a flower. (before / after)

2. Zoe waters her seed. A root grows down first. True or false: The root grows DOWN into the soil.

3. Zoe sees a seedling push up. Fill in the blank. A seedling needs ___, water, and soil to grow. (sunlight / sand)

4. Zoe spots a rare find — a plant with buds AND roots showing. Put these in order: flower, seed, seedling, root. Write 1, 2, 3, 4.

5. Zoe asks: why do flowers make pollen? Circle the best answer. Pollen helps plants ___. (make new seeds / grow roots / drink water)

6. Zoe finds a hidden treasure — a seed pod with seeds inside. She thinks: these seeds fell from a flower. Explain two things a seed needs to sprout. Use the words soil and water in your answer.

7. Zoe draws the plant life cycle. She notices the cycle repeats. A flower makes seeds. Seeds grow into new plants. Explain in two sentences why we call it a CYCLE and not a line.

8. Zoe completes her spring garden map. She finds a unique item — a sunflower that has seeds, a seedling, a young plant, and a full flower ALL growing nearby. Zoe wants to show her class what would happen if bees stopped visiting flowers. Write two sentences. Tell what bees do for flowers. Tell what might happen to new plants without bees.

Answer Key: Zoe's Spring Garden Plant Life Cycle Adventure

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Before the worksheet, show students a real seed and a seedling side by side. Ask: which stage comes first? This mirrors Zoe's discovery in Q1 and anchors the life cycle sequence students will trace across all eight questions.

1. Zoe finds a tiny seed. A seed is the first stage. Circle the right word. A seed comes _____ a flower. (before / after)

Answer: Q1: The plant life cycle starts with a seed. A seed must grow before it becomes a flower. Answer: Zoe circles BEFORE — a seed comes BEFORE a flower.

2. Zoe waters her seed. A root grows down first. True or false: The root grows DOWN into the soil.

Answer: Q2: Real plant science — roots grow downward into soil to find water. This is called gravitropism. Answer: TRUE — the root grows DOWN into the soil.

3. Zoe sees a seedling push up. Fill in the blank. A seedling needs ___, water, and soil to grow. (sunlight / sand)

Answer: Q3: Plants need sunlight for photosynthesis, water for cells, and soil for nutrients. Sand does not give nutrients. Answer: Zoe writes SUNLIGHT — a seedling needs sunlight, water, and soil to grow.

4. Zoe spots a rare find — a plant with buds AND roots showing. Put these in order: flower, seed, seedling, root. Write 1, 2, 3, 4.

Answer: Q4: Plant life cycle order — seed sprouts first, then root grows, then seedling pushes up, then flower blooms. Answer: seed = 1, root = 2, seedling = 3, flower = 4.

5. Zoe asks: why do flowers make pollen? Circle the best answer. Pollen helps plants ___. (make new seeds / grow roots / drink water)

Answer: Q5: Flowers produce pollen for pollination. Pollinators carry pollen between flowers. Fertilization then produces new seeds. Roots and water intake are separate functions. Answer: Zoe circles MAKE NEW SEEDS — pollen helps plants make new seeds.

6. Zoe finds a hidden treasure — a seed pod with seeds inside. She thinks: these seeds fell from a flower. Explain two things a seed needs to sprout. Use the words soil and water in your answer.

Answer: Q6: Germination requires water to soften the seed coat and trigger growth, and soil to anchor the root and supply nutrients. Sunlight is needed later for the seedling but not always for germination itself. Answer: A seed needs water to soften its coat and start growing. It needs soil to hold the root and give it food. (Both words used, two ideas explained.)

7. Zoe draws the plant life cycle. She notices the cycle repeats. A flower makes seeds. Seeds grow into new plants. Explain in two sentences why we call it a CYCLE and not a line.

Answer: Q7: A line has a start and an end. A cycle loops back to the beginning — the flower produces seeds, seeds grow into plants, those plants make new flowers, and the process repeats without ending. Answer: We call it a cycle because it goes in a loop. The flower makes seeds that grow into a new flower again.

8. Zoe completes her spring garden map. She finds a unique item — a sunflower that has seeds, a seedling, a young plant, and a full flower ALL growing nearby. Zoe wants to show her class what would happen if bees

stopped visiting flowers. Write two sentences. Tell what bees do for flowers. Tell what might happen to new plants without bees.

Answer: Q8: Bees are pollinators — they carry pollen from one flower to another. This pollination allows flowers to be fertilized and produce seeds. Without bees, flowers may not get pollinated, so fewer seeds form, and fewer new plants can grow. This connects to the next concept: animals and plants depend on each other (interdependence). Answer: Bees carry pollen from flower to flower so seeds can form. Without bees, flowers may not make seeds, so new plants could not grow. Zoe completes her garden map and understands the full plant life cycle.