

Science Answer Key: Weeks 21–24

Accept child spellings that are readable. For drawings, look for the science idea, not art skill.

Week 21: Mapping Earth's Features

1–5. River: blue, wavy line. Lake: blue, closed shape or blob. Mountain: brown, triangle or bumps. Ocean: blue, large area along an edge. Tree: green, dot or small circle. Accept any clear symbol that matches the color.

6. Look for: the place drawn from above (tops of things, not side views); at least one land and one water feature; a key box whose symbols match the map; arrows running downhill toward low or wet spots.

7. above.

8. Look for: blue means water (river, lake, or ocean); a reason such as "water looks blue" or "the key told me."

Scoring: Developing / Approaching / Proficient / Exemplary. Proficient: the key and map match, the map is drawn from above, and the child explains that blue means water.

Week 22: Water on Earth

1–3. Answers come from the child's test. Usually the cube in the sun or under the lamp melts 1st, the counter cube 2nd, and the washcloth cube 3rd. Accept real results with times written.

4. Heat from the sun or lamp (warmth).

5. Liquid: ocean, rain, river, lake, pond.

6. Solid: glacier, snow, ice cap, hail, frost.

7. cold (frozen); warm (melted). Accept equivalent words.

8. Put it in the freezer or somewhere very cold.

9. Look for: ice moves slowly and scrapes or scratches the ground; it carries and drops rocks and gravel; the change is slow.

Scoring: Developing / Approaching / Proficient / Exemplary. Proficient: the table is filled from the real test, all 10 words are sorted correctly, and the child names heat as the cause of melting.

Week 23: Weather Patterns

Weather log: answers vary by day. Look for: every row filled; one choice in each column; rain or snow marked yes or no.

Pinwheel table: answers vary. Most children find the open place has the most spins.

1. Look for: names the spot with the most spins; walls and bushes are in the way of the moving air.

2. Look for: a pattern that matches the log, such as "It was cloudy three days" or "The open spot was windiest every time."

3. Look for: fast: a storm knocks down a tree or blows sand off a beach; slow: wind wears away a rock over many years.

Scoring: Developing / Approaching / Proficient / Exemplary. Proficient: at least four days are logged in all columns, spin counts are recorded, and the child gives one fast and one slow wind change.

Week 24: Earth's Systems Review

1–6. 1 fast, 2 slow, 3 fast, 4 slow, 5 fast, 6 slow.

7. sand or soil washed down the mountain, made a groove or filled the lake; fast.

8. gravel and sand were scraped and dropped, leaving scratches; slow in real life (accept fast for the pan if the child explains the model was sped up).

9. dry sand or soil blew away; fast.

10. liquid; solid (either order).

11. land and water (shapes of places from above); what the symbols or colors mean.

12. Look for: names at least one force (water, ice, wind); says some changes are fast and some are slow.

Scoring: Developing / Approaching / Proficient / Exemplary. Proficient: at least five of six fast or slow sorts are correct and the child names what water, ice, and wind moved in the pan.

Weeks 21–24: Vocabulary and Big Ideas

1–9. 1 map, 2 key, 3 symbol, 4 solid, 5 liquid, 6 glacier, 7 temperature, 8 Wind, 9 weather. (Ice cap is an extra word.)

10. Look for: one force named; how it moves soil, sand, or rock (water carries it, ice scrapes it, wind blows it); fast or slow with an example.

Scoring: Developing / Approaching / Proficient / Exemplary. Proficient: at least seven blanks are correct and the explanation names a force, what it moves, and whether the change is fast or slow.

Weeks 21–24: My Reflection

Look for: honest checks; a drawing with labels that shows a real idea from the unit (a map, ice, weather, or the pan); two sentences that tell what the drawing shows.

Talk about it: for any box left blank, revisit that week's investigation together.

Scoring: Developing / Approaching / Proficient / Exemplary. Proficient: the drawing and sentences clearly show one correct science idea from Weeks 21–24.