

Answer Keys: Chapter 2 Practice Tests

Practice Test A and Practice Test B · With explanations, essay rubric, and model paragraphs

FOR THE GRADER

Every answer below traces directly to Mr. Schwartz's Chapter 2 text (Lessons 1–3). The short gray note after each answer says *why* — read those aloud for any question Leela misses. That is where the learning happens.

PRACTICE TEST A · ANSWER KEY

PART I — TRUE AND FALSE (3 PTS EACH)

1. F	2. T	3. F	4. T	5. F	6. T
7. F	8. F	9. T	10. F		

1. **False.** One *rotation* takes 24 hours. One *revolution* takes 365¼ days.
2. **True.** Order from the center out: inner core, outer core, mantle, crust.
3. **False.** Reversed. Weathering breaks rock down; erosion moves the pieces.
4. **True.** The tilt is 23.5° and Earth stays tilted as it orbits, so one half is always tilted toward the sun.
5. **False.** Greenland is the world's largest *island*, not a continent.
6. **True.** One day of data = weather. One full year of data = climate.
7. **False.** Plates move a few *inches per year* — far too slow to feel.
8. **False.** The rain shadow is on the side facing *away* from the ocean. The ocean-facing side gets the rain.
9. **True.** 97% salt water; of the 3% freshwater, most is frozen — leaving about 1% usable.
10. **False.** Desalination works, but the process is expensive.

PART II — MATCHING (2 PTS EACH)

1. H Magma	2. G Isthmus	3. B Axis	4. J Tsunami	5. D Biosphere	6. E Delta
7. I Rain shadow	8. A Aquifer	9. F Fault	10. C Biome		

PART III — MULTIPLE CHOICE (2.5 PTS EACH)

1. B	2. C	3. C	4. D	5. B	6. D
7. A	8. C	9. A	10. B	11. C	12. D

1. **B — the outer core.** The inner core is solid; the outer core is melted, liquid metal.

2. **C — stratosphere.** The four subsystems are hydrosphere, lithosphere, atmosphere, and biosphere.
3. **C — 71 percent.** 71% water, 29% land. The 97% figure is the share of *Earth's water* that is salt water — a common trap.
4. **D — 53°F.** $3.5^{\circ}\text{F per } 1,000 \text{ ft} \times 5 = 17.5^{\circ}\text{F of cooling. } 70 - 17.5 = 52.5$, about 53°F.
5. **B — the Tropic of Cancer.** June 21, summer solstice in the Northern Hemisphere. December 22 is the Tropic of Capricorn.
6. **D — changes in air pressure caused by uneven heating.** Warm low-pressure air rises; cooler high-pressure air rushes in beneath it.
7. **A — Tropical, Desert, Humid Temperate, Cold Temperate, Polar.** Köppen's five, 1900. High Mountain was added later as a sixth. Grassland and tundra are *biomes*, not climate zones.
8. **C — 16.** 7 is the number of continents; don't confuse the two.
9. **A — a continental shelf.** A trench is a long, narrow, steep-sided cut — the opposite shape.
10. **B — Pacific, Atlantic, Indian, Southern, Arctic.** The Pacific covers more area than all of Earth's land combined.
11. **C — evaporation.** Condensation is vapor turning back into liquid or solid.
12. **D — Australia and Antarctica.** All other continents border land as well as water.

PART IV — READING PASSAGE (5 PTS EACH)

1. **B** Paragraph 1: the plates drift apart, magma rises through the widening crack and hardens into new rock.
2. **C** A and B are true details, not the main idea. D is background. The passage is built around the trade-off: the same activity gives cheap heat *and* causes eruptions.

BONUS (2 PTS EACH)

1. **About 93 million miles (150 million km).**
2. **About 78 percent.** Oxygen is about 21 percent.
3. **Wladimir Köppen, a German scientist, in 1900.**
4. **The Mariana Trench, in the Pacific Ocean** — more than 35,000 feet (10,668 m) deep.
5. **100 miles (161 km) above Earth** — where the atmosphere ends.

PRACTICE TEST B · ANSWER KEY

PART I — TRUE AND FALSE (3 PTS EACH)

1. T	2. F	3. F	4. T	5. T	6. F
7. F	8. T	9. T	10. F		

1. **True.** Around December 22 the North Pole tilts away from the sun — winter in the north, summer beginning in the south.
2. **False.** At an equinox day and night are equal — 12 hours each — *everywhere* on Earth.
3. **False.** Elevation also influences climate. Same latitude, higher elevation = colder.
4. **True.** Soft, porous rock wears faster than dense rock like granite — this is why Bryce Canyon has its unusual shapes.
5. **True.** Warm water moves away from the Equator; cold polar water moves toward it.
6. **False.** Smallest to largest: glacier → ice cap → ice sheet.
7. **False.** Moist air is *less* dense than dry air, so it *rises* — which is how evaporated water gets up into the atmosphere.
8. **True.** A steep cliff often forms at least one side of a plateau.
9. **True.** The total amount of water has not changed since Earth formed; it only changes form.
10. **False.** Earthquakes can also be caused by the force of erupting volcanoes. Watch the word "only."

PART II — MATCHING (2 PTS EACH)

1. I Revolution	2. J Weathering	3. D Elevation	4. G Peninsula	5. E Equinox	6. F Groundwater
7. C Desalination	8. H Plateau	9. A Condensation	10. B Cont. shelf		

PART III — MULTIPLE CHOICE (2.5 PTS EACH)

1. C	2. A	3. D	4. C	5. D	6. C
7. B	8. A	9. D	10. B	11. A	12. D

1. **C.** The atmosphere thins as altitude increases, and thinner air retains less heat. Elevation matters as much as latitude.
2. **A.** Classic rain shadow. The moist air drops its rain climbing the ocean-facing slope; little is left for the far side.
3. **D.** The Appalachians have been rounded and crumbled by millions of years of weathering.
4. **C.** Scientists study vibrations from earthquakes and underground explosions to learn what materials are inside and how thick and hot each layer is.
5. **D.** Plate edges forced under surrounding plates created a band of volcanoes more than 24,000 miles long.
6. **C.** Plates move apart, magma rises through the crack, cools, and builds up until it reaches the surface.

7. **B.** The sun's heat evaporates water; the vapor rises and gathers into clouds; when those clouds are saturated, condensation occurs and precipitation falls.
8. **A.** One day of precipitation data describes weather. Climate needs a full year or more.
9. **D.** Deforestation strips the roots that hold soil, producing landslides and erosion — the same result as natural erosion, but far faster.
10. **B.** The tilt, not distance, causes seasons. A is not stated anywhere in the chapter and is not the correction being asked for — distance from the sun is not what makes seasons.
11. **A.** An isthmus connects two larger land areas; Panama is the narrowest place in the Americas.
12. **D.** Most freshwater is locked in the Arctic and Antarctic ice caps, leaving only about 1% of all Earth's water usable.

PART IV — READING PASSAGE (5 PTS EACH)

1. **B** Paragraph 1 states it directly: trees were cut, and without roots to hold it the topsoil dried, loosened, and blew away.
2. **C** The final paragraph contrasts seedlings that were "planted and then abandoned" with plantings local farmers "chose, tended, and harvested themselves." B overstates — the passage says progress was slow, not that the project failed.

BONUS (2 PTS EACH)

1. **About 1,800 miles (2,897 km).**
2. **The Mid-Atlantic Ridge.**
3. **23.5 degrees.**
4. **More than 24,000 miles (38,624 km).**
5. **High Mountain (F).**

ESSAY SCORING · BOTH TESTS

POINTS	WHAT IT LOOKS LIKE
9–10	Clear topic sentence; three or more specific supporting details using Chapter 2 vocabulary correctly; a conclusion that does more than repeat the opening; near-flawless spelling, punctuation, capitalization, and word choice.
7–8	All parts present and the required number of examples given, but details are general ("humans hurt the earth") rather than specific, or there are a few mechanical errors.
5–6	Missing one structural part (no real conclusion, or fewer than three details), or vocabulary is used loosely — for example, "erosion" used where "weathering" is meant.
0–4	Not a paragraph, off topic, or fewer than two examples on one side of the prompt.

WHERE MOST POINTS GET LOST

Not on facts — on **mechanics and specificity**. "Volcanoes and stuff change the earth" earns far less than "When tectonic plates collide, one plate can be forced over another, building mountains and volcanoes." Name the process, then give the example.

MODEL PARAGRAPH — TEST A PROMPT (NATURAL FORCES VS. HUMAN ACTIONS)

The surface of Earth is constantly being reshaped, both by natural forces that have worked for millions of years and by human actions that work far more quickly. Natural forces change the land in several ways. When tectonic plates are crushed together, the edges crumble and break, forming jagged mountain ranges, volcanoes, and deep ocean trenches. Weathering and erosion also reshape the surface: flowing water and blowing wind wore away the rock of the Grand Canyon over millions of years, and the same forces have left the Appalachian Mountains rounded and crumbled. Human actions change the land just as dramatically, but in a fraction of the time. Coal mining has leveled entire mountains, and people use dynamite to blast tunnels through mountain ranges when building highways and railroads. Humans have also cut down millions of acres of forest, and without roots to hold the soil in place, deadly landslides and severe erosion follow. The difference between the two is speed. Natural change happens slowly and creates the landforms that make our planet unique, while human change happens quickly and can threaten our own safety and survival. Because studies show that humans have altered Earth more in the last fifty years than in any period in history, protecting the environment is essential if the quality of life is to improve for future generations.

MODEL PARAGRAPH — TEST B PROMPT (BENEFITS AND OBSTACLES)

The physical environment shapes human life by offering people valuable benefits and, at the same time, serious obstacles. One clear benefit is fertile land. Because valleys receive water runoff and topsoil from the higher land around them, they often have rich soil that farmers use to raise crops and graze livestock. Water is a second benefit: rivers, lakes, and oceans provide food, transportation, and work, and groundwater stored in aquifers supplies drinking water and irrigation for crops. The same environment, however, creates real obstacles. Mountains block the movement of people and goods, and they cast rain shadows that leave the land beyond them dry and difficult to farm. Sudden events are an even greater obstacle, since earthquakes, volcanic eruptions, and tsunamis can destroy entire communities within minutes. People respond by adapting and modifying their surroundings, digging wells to reach groundwater, using desalination to make seawater drinkable, and cutting canals such as the one across the Isthmus of Panama to shorten a journey between two oceans. In the end, the physical environment does not simply decide how people live; it sets the conditions that human beings must work with, work around, and sometimes reshape.

SCORING THE WHOLE TEST

Part I 30 + Part II 20 + Part III 30 + Part IV 10 + Part V 10 = **100 points**, plus up to 10 bonus points. USJ scale: 93–100 = A, 90–92 = A–, 87–89 = B+, 83–86 = B.