

Practice Test A: Chapter 2

Grade-level practice · 100 points + 10 bonus · Closed book

Name _____

Period _____

Date _____

PART I · TRUE AND FALSE

10 questions × 3 pts = 30

Write **T** if the statement is true or **F** if it is false. Read carefully — one wrong word makes the whole statement false.

1. T F Earth completes one rotation on its axis every 365¼ days.
2. T F The mantle is the layer of Earth located between the crust and the outer core.
3. T F Weathering moves broken bits of rock to a new location, while erosion breaks the rock down where it sits.
4. T F Earth has seasons because it stays tilted 23.5 degrees on its axis as it revolves around the sun.
5. T F Greenland is considered the world's smallest continent.
6. T F Measuring the amount of precipitation in an area for one full year provides data about that area's climate.
7. T F Because tectonic plates move several feet every day, people can feel the ground shifting beneath them.
8. T F A rain shadow forms on the side of a mountain that faces toward the ocean.
9. T F Only about 1 percent of all the water on Earth is liquid freshwater that humans and other living organisms use.
10. T F Desalination is an inexpensive process, which is why most of the world relies on it for drinking water.

PART II · MATCHING

10 questions × 2 pts = 20

Write the letter of the term from the box next to its definition. Each term is used exactly once.

A. Aquifer**B. Axis****C. Biome****D. Biosphere****E. Delta****F. Fault****G. Isthmus****H. Magma****I. Rain shadow****J. Tsunami**

1. ____ Melted rock.
2. ____ A narrow strip of land connecting two larger land areas.
3. ____ An imaginary line that runs through Earth's center from the North Pole to the South Pole.
4. ____ A giant ocean wave caused by volcanic eruptions or movement of the earth under the ocean floor.
5. ____ All that is living on the surface of Earth, close to the surface, or in the atmosphere.
6. ____ An area where sand, silt, clay, or gravel is deposited at the mouth of a river.
7. ____ A region of reduced rainfall on the side of a high mountain facing away from the ocean.
8. ____ An underground layer of rock through which groundwater flows.
9. ____ The result when the rocks on one side or both sides of a crack in Earth's crust have been moved by forces within Earth.
10. ____ A type of large ecosystem with similar life-forms and climates.

Circle the letter of the best answer.

1. Which layer of Earth is made of melted, liquid metal?
 - A. the inner core
 - B. the outer core
 - C. the mantle
 - D. the crust
2. Which of the following is **NOT** one of Earth's four physical subsystems?
 - A. hydrosphere
 - B. lithosphere
 - C. stratosphere
 - D. biosphere
3. About what percentage of Earth's **surface** is covered by water?
 - A. 29 percent
 - B. 50 percent
 - C. 71 percent
 - D. 97 percent
4. If the average temperature at sea level is 70°F, about what would the average temperature be at 5,000 feet?
 - A. 87°F
 - B. 70°F
 - C. 62°F
 - D. 53°F
5. On about June 21, the sun's direct rays strike which line of latitude?
 - A. the Equator
 - B. the Tropic of Cancer
 - C. the Tropic of Capricorn
 - D. the Prime Meridian
6. What causes wind?
 - A. the rotation of Earth on its axis
 - B. the movement of tectonic plates below the crust
 - C. the condensation of water vapor into clouds
 - D. changes in air pressure caused by uneven heating of Earth's surface

7. Which choice correctly lists the five climate zones Köppen created in 1900?
- A. Tropical, Desert, Humid Temperate, Cold Temperate, Polar
 - B. Tropical, Desert, Grassland, Tundra, Polar
 - C. Equatorial, Desert, Temperate, Arctic, High Mountain
 - D. Rain Forest, Desert, Grassland, Tundra, High Mountain
8. Earth's rigid crust is made up of how many enormous tectonic plates?
- A. 5
 - B. 7
 - C. 16
 - D. 24
9. Which landform is an underwater plain that borders a continent?
- A. a continental shelf
 - B. a trench
 - C. a ridge
 - D. an ocean basin
10. Which choice lists the five oceans from **largest to smallest**?
- A. Atlantic, Pacific, Indian, Arctic, Southern
 - B. Pacific, Atlantic, Indian, Southern, Arctic
 - C. Pacific, Indian, Atlantic, Arctic, Southern
 - D. Atlantic, Indian, Pacific, Southern, Arctic
11. In the water cycle, which process changes liquid water on Earth's surface into water vapor?
- A. condensation
 - B. precipitation
 - C. evaporation
 - D. desalination
12. Which pair of continents is completely surrounded by water?
- A. Africa and Australia
 - B. Antarctica and South America
 - C. Europe and Asia
 - D. Australia and Antarctica

PART IV · READING PASSAGE

2 questions × 5 pts = 10

Read the passage below, then answer the two questions that follow.

THE ISLAND THAT IS STILL BEING BUILT

Iceland is one of the few places on Earth where a person can stand on dry land and see two tectonic plates pulling apart. The island sits directly on top of the Mid-Atlantic Ridge, the underwater mountain range that runs down the center of the Atlantic Ocean. Along this ridge, the North American Plate and the Eurasian Plate are drifting away from one another at roughly the rate a fingernail grows. As they separate, magma rises through the widening crack and hardens into new rock. Iceland is, quite literally, a little larger every year.

That same restless activity gives Icelanders something most countries would envy. Heat from below the surface warms underground water so reliably that nearly every home in the country is heated by it, and a large share of the nation's electricity is produced from it as well. Sidewalks in the capital are kept free of ice in winter by warm water piped beneath them.

The trade-off arrives without warning. Iceland has roughly thirty active volcanic systems, and eruptions can bury farmland in ash, melt glaciers into sudden floods, and — as happened in 2010 — fill the sky with enough ash to ground airplanes across an entire continent. Icelanders have learned to live with a landscape that offers cheap, clean warmth in one hand and disaster in the other. Most would say the bargain is worth it.

1. Based on the passage, why is Iceland growing slightly larger each year?
 - A. Ocean currents deposit sand along its coastline.
 - B. Two tectonic plates are moving apart and magma hardens into new rock in the gap.
 - C. Glaciers melting into the sea expose more land.
 - D. Weathering and erosion are wearing down its mountains.
2. Which sentence best states the main idea of the passage?
 - A. Volcanic eruptions in Iceland once stopped air travel across Europe.
 - B. Iceland has more active volcanoes than almost any other country.
 - C. The same forces that make Iceland dangerous also make it unusually rich in energy.
 - D. The Mid-Atlantic Ridge is the longest underwater mountain range on Earth.

PART V · ESSAY

10 pts

Write a **one-paragraph** essay. Include an introduction, at least three supporting details, and a conclusion. Part of your grade comes from academic language — spelling, punctuation, capitalization, and word choice.

Prompt: Explain how **natural forces** change the surface of Earth and how **human actions** change the surface of Earth. Give at least two ways for each.

BONUS · 5 QUESTIONS × 2 PTS = 10 EXTRA POINTS

1. About how many miles is Earth from the sun? _____
2. About what percentage of the atmosphere is nitrogen? _____
3. Who invented the climate zone system, and in what year? _____
4. What is the deepest location on Earth? _____
5. How far above Earth's surface does outer space begin? _____