

AP Environmental Science

Name: _____ Score: _____

1. **Plate tectonics** is the idea that...

- ☐ the oceans are drying up
- ☐ Earth's outer shell is broken into moving plates
- ☐ continents never move
- ☐ the Earth is completely solid

2. Soil forms when weathering breaks down...

- ☐ air into liquid
- ☐ the Sun
- ☐ rock into smaller and smaller pieces
- ☐ water into gas

3. Soil **texture** is determined by...

- ☐ the number of worms
- ☐ the mix of sand, silt, and clay particle sizes
- ☐ the temperature
- ☐ the colour of the soil

4. Earth's **atmosphere** is...

- ☐ the solid rock inside Earth
- ☐ the oceans
- ☐ the Moon
- ☐ the layer of gases surrounding the planet

5. What ultimately drives global wind patterns?

- ☐ the Moon's gravity
- ☐ uneven heating of Earth by the Sun
- ☐ earthquakes
- ☐ ocean tides

6. Pollution added upstream in a watershed stays where it enters the water.

- ☐ True
- ☐ False

7. When it is summer in the north, it is winter in the south.

☐ True ☐ False

8. The dry region on the far side of a mountain, where rain rarely falls, is a rain _____.

9. Cold, nutrient-rich water rising to the surface off Peru is called _____.

10. Where plates move apart and new crust forms, the boundary is called _____.

1. **Earth's outer shell is broken into moving plates**

Plate **tectonics**: Earth's rigid outer shell is broken into **tectonic plates** that slowly move.

2. **rock into smaller and smaller pieces**

Soil starts as **weathered** rock – broken down over long times into mineral particles.

3. **the mix of sand, silt, and clay particle sizes**

Soil **texture** comes from the proportion of **sand**, **silt**, and **clay** it contains.

4. **the layer of gases surrounding the planet**

The **atmosphere** is the blanket of gases (mostly nitrogen and oxygen) around Earth.

5. **uneven heating of Earth by the Sun**

The Sun heats the equator more than the poles; this **uneven heating** drives the winds.

6. **False**

False. A watershed is connected by flowing water, so pollution added upstream travels downstream to everyone below.

7. **True**

The two hemispheres tilt opposite ways, so they always have opposite seasons.

8. **shadow**

A **rain shadow** forms where a mountain forces air to drop its rain on one side, leaving the other dry.

9. **upwelling**

Upwelling brings cold, nutrient-rich water up, feeding rich fisheries – it weakens during El Nino.

10. **divergent**

At a **divergent** boundary plates pull apart, and new crust rises to fill the gap.