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
   - ☐ sunlight into heat
   - ☐ rock into smaller pieces
   - ☐ water into gas
3. Soil **texture** is determined by…
   - ☐ the number of worms in the soil
   - ☐ the mix of sand, silt, and clay particle sizes
   - ☐ the temperature of the soil
   - ☐ the colour of the soil layers
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

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☐ 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 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.

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