

4. Earth Systems and Resources

Starter Quiz · 课前小测

AP Environmental Science

Name: _____ Score: _____

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

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

2. Soil forms when weathering breaks down...

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

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

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

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

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

5. What ultimately drives global wind patterns?

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

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

7. The removal of soil by wind or water is called _____.

8. The smallest particles, which hold water tightly, are _____.

9. The layer above the troposphere, which holds the protective ozone layer, is the _____.

10. Dry air sinking around 30 degrees latitude creates many of the world's _____.

AP Environmental Science

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. divergent

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

7. erosion

Erosion carries soil away — and it happens far faster than soil forms.

8. clay

Clay particles are tiny with tiny gaps, so they hold water and can waterlog.

9. stratosphere

The **stratosphere** contains the **ozone layer**, which absorbs harmful ultraviolet rays.

10. deserts

The sinking dry air near 30 degrees gives little rain, forming deserts like the Sahara.