Earth
Chapter 4 Section 2
Weathering and Organic Processes Form Soil

Topic: Earth's Crust

Learning Target: Describe the components of soil: texture, fertility, and resistance to erosion

Unifying Principal: Earth has changed over time and continues to change.

Read about the ingredients of soil

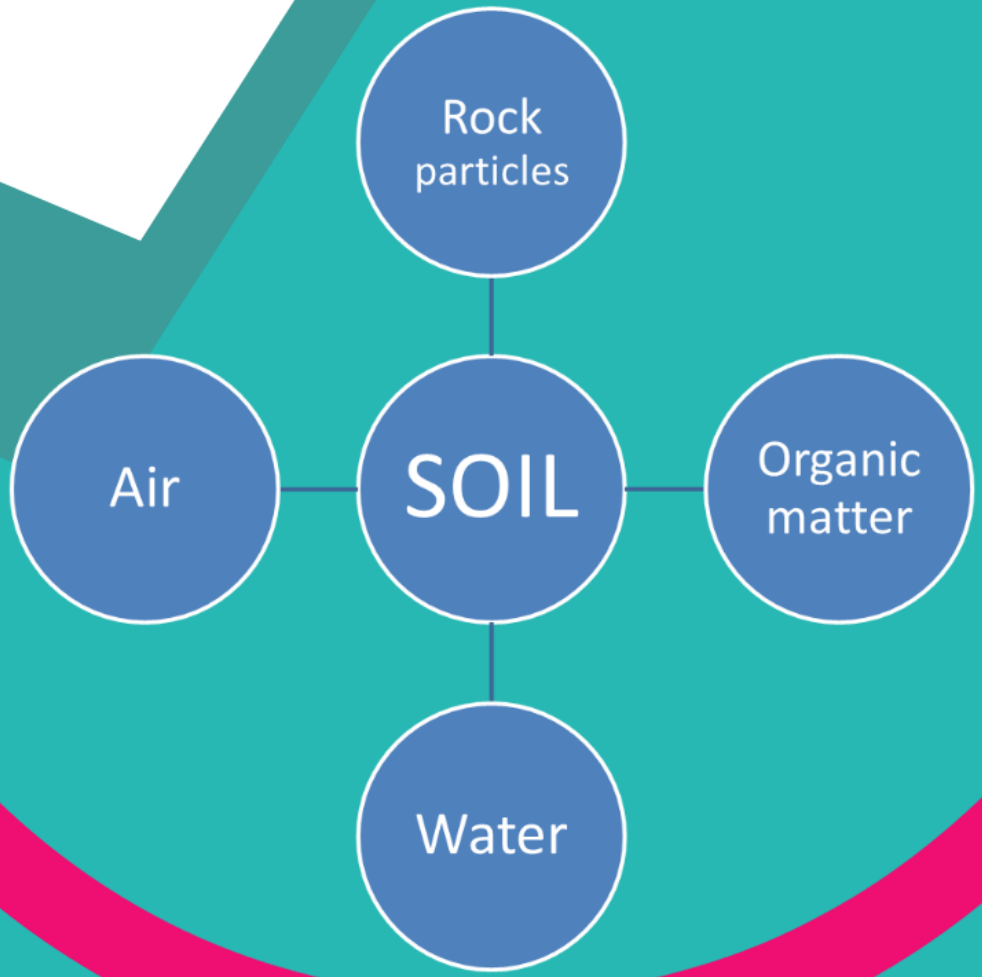
p. 123

Soil composition (p.123)

Soil is a mixture of 4 materials:

1. **weathered rock particles**
2. **organic matter (comes from living organisms)**
3. **water**
4. **air**

A graphic organizer can be used to help you remember the four ingredients of soil



humus: decayed organic matter in soil
•humus makes the soil black in color

Read about the layers of soil called soil horizons p. 124

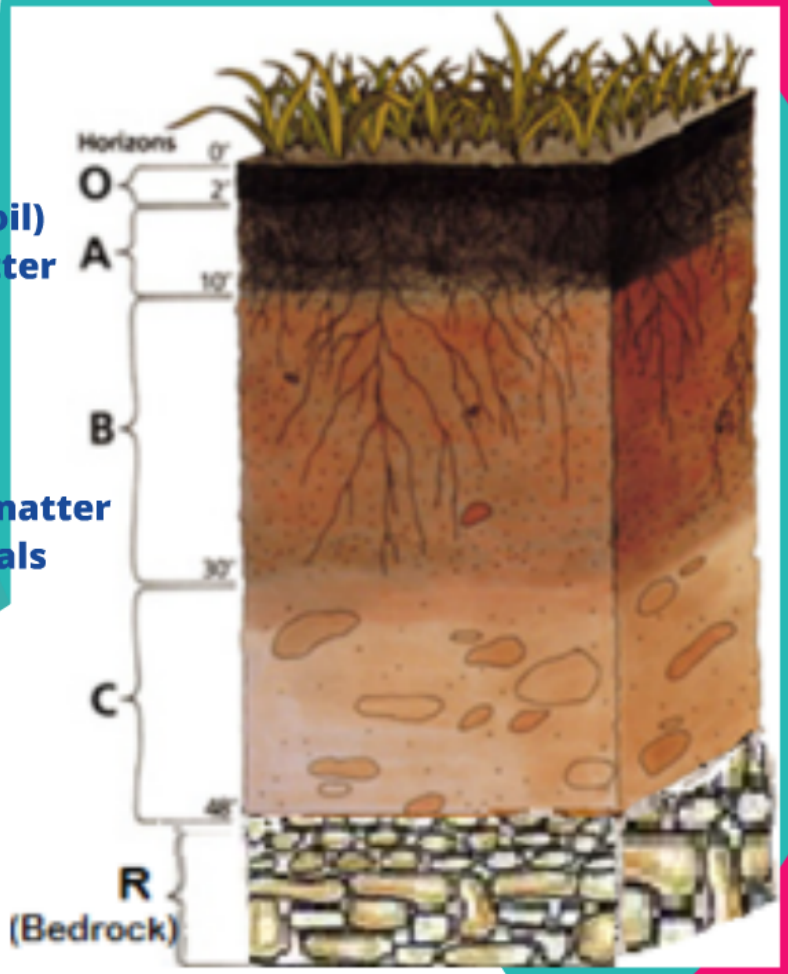
soil horizon: a layer of soil with different properties than the layers above and below it.

Soil horizons (p.124)

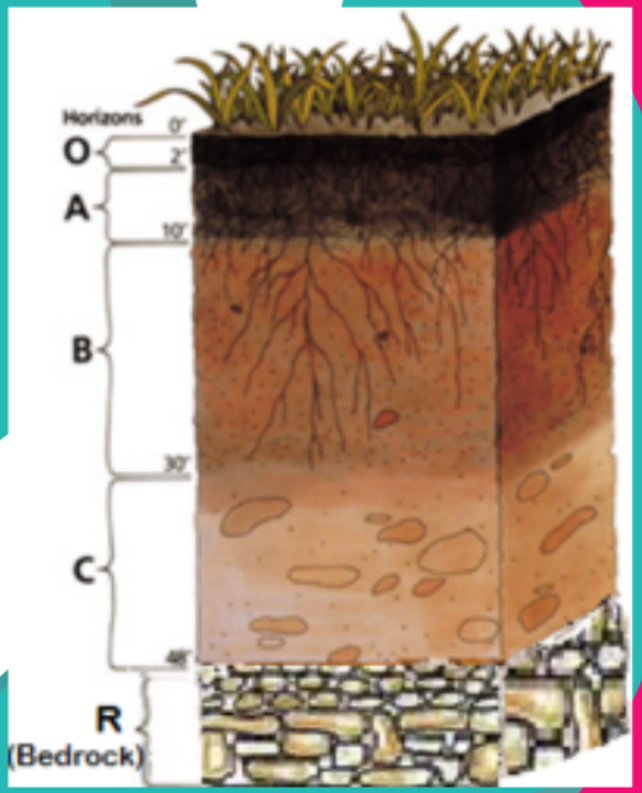
A Horizon:
- Upper layer (usually called topsoil)
- Mostly organic matter
- Dark color (has a lot of humus)

B Horizon:
- Not much organic matter
- Has clay and minerals
- Reddish color

C Horizon:
- Deepest layer
- Largest rocks
- Light-yellowish brown color



Take a few minutes to draw/color the A, B, and C horizons in your notes.



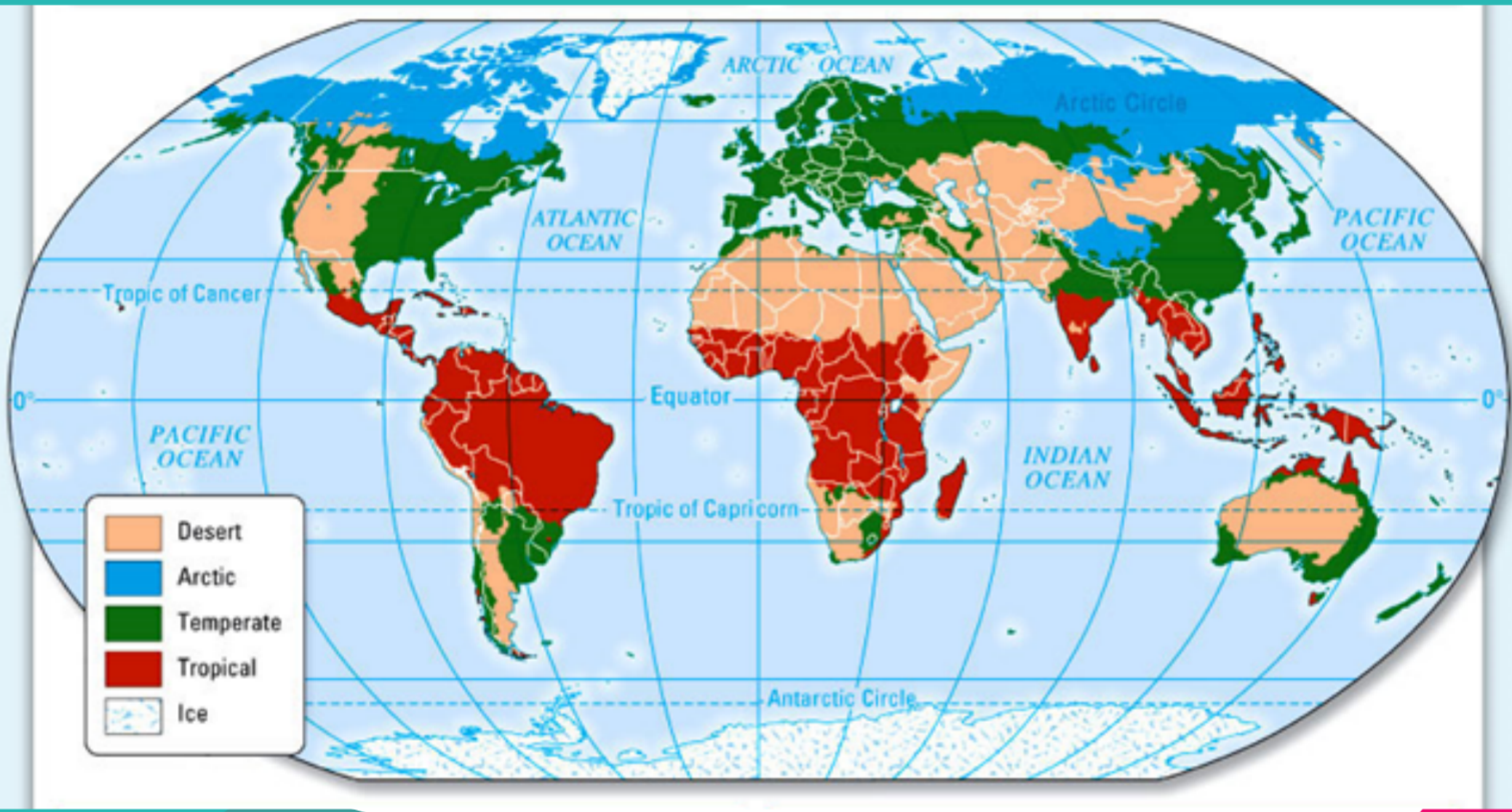
Climate and landforms affect soil (p.124)

Different climates have different types of soil due to the differences in temperature, humidity, and types of weathered rocks that form the soil.

Examples:

- **tropical soil**
- **arctic soil**

Examples:

- tropical soil
- arctic soil
- desert soil
- temperate soil

rocks that form the soil.