



Apple Land Use Model

Grades 3-12

Imagine the Earth as an apple. Use this large, 18"X 18" apple model to demonstrate the distribution of the Earth's water and land resources. The model is two layers of durable styrene board with a handle on the back of the bottom layer. The top layer is cut into sections and held to the bottom layer by magnets. Remove the top layer of the apple to reveal the image underneath.

Use the following narrative with the *Apple Land Use Model* to demonstrate the how the distribution of Earth's water and land resources affects food production.

Narrative:

1. *Hold up the **Apple Land Use Model**.* "This apple represents the **planet Earth**."
2. *Remove and hold up the **3/4 piece**.* "Nearly three-quarters of the Earth is covered in **water**."
3. *Point to the remaining **1/4 of the apple**.* "The remaining quarter represents **land area**."
4. *Remove and hold up the **1/8 piece**.* "This section represents **uninhabitable land** including deserts, mountains, and polar regions that are not suitable for people to live or grow crops."
5. *Remove and hold up the **3/32 piece**.* "This section represents **habitable, but non-arable land**. People can live on this land, but crops cannot be grown because it is too rocky, hot, wet, or it has been developed."
6. *Remove and hold up the **1/32 piece**.* "Only 1/32 of the Earth's surface has the potential to grow crops. This section represents **arable land**."
7. *Point to the **top layer of dark brown soil**.* "This small section of **topsoil** represents all the soil on Earth upon which humans depend for food production."

The apple model is a great companion resource for lessons found on the [National Agricultural Literacy Curriculum Matrix](#). Activities include slicing up an apple or using the Apple Land Use Model to demonstrate the distribution of Earth's soil resources and exploring scenarios involving the dollar valuation of soil.