

## *Earth Apple (Grades 3-12)*

### **Objective**

Students will comprehend that the earth and all of its resources are limited.

### **Time Needed**

15-20 minutes (depending on length of discussion)

### **Materials**

One large apple, sharp knife, cutting board, photo of Earth (from space)

### **Procedure**

1. Consider this apple represents the earth. Slice the apple into quarters, and set three quarters aside.
2. The three quarters represent the oceans on the earth (75% of the earth is water).
3. One quarter represents the earth's land area. Slice this quarter in half and set aside one piece. One eighth represents the land area that inhospitable for humans (polar areas, deserts, high mountains).
4. One eighth represents the land areas where people live, but necessarily where they grow food that's needed for life.
5. Slice the 1/8 into four sections. (1) Of these (1/16) represents the areas where we cannot grow food – either the soil is too poor, the slope is too steep, the soil is too wet, or the temperatures are too cold. (2) Another section represents the land areas that are covered with concrete or pavement (cities, parking lots, highways and interstates). (3) Another section represents areas where people live (cities, houses, condominiums and apartments).
6. The remaining section represents the land area of the earth where it is conducive to grow food. Peel the 1/32 slice of earth. This tiny bit of peel represents the very thin surface of the earth's crust where humans depend upon the rich topsoil to grow food for the entire world population.

### **Evaluation**

Our planet is finite. We do not realize how important our soil resource is. It takes 300-500 years to form one inch of valuable topsoil. This same inch could be washed away overnight in a rainstorm. What can you do to prevent soil erosion and protect our world's resources?



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*Borrowed from the North Carolina Natural Resources Conservation Services website*