MOST*

Renew a Bean

Materials

- 92 of one type of bean
- 8 of another type of bean
- Cup
- Paper
- Writing utensil

Instructions

1 Put all hundred beans or a hundred of something else that has two types that feel similar but look different in a cup. The one that has 92 beans will represent **non-renewable energy**, or energy like coal and oil that is gone once it is used. The eight beans will represent **renewable energy**, or energy like solar or wind power that is not consumed when used or can be replenish relativity quickly.

2 You will be taking ten beans out at a time and only putting the renewable beans back in the cup. Predict how long it will take to only have the renewable beans left. Without looking, you will take out ten beans at a time and record the beans that are left in the cup. Make sure to record the amount of renewable and non-renewable beans you have left. You will only put the renewable beans back in the cup. Keep taking ten beans out until you only have renewable beans left.

3 How long did it take for you to only be left with the renewable beans? Was your prediction correct? What would happen if you had more renewable beans? What would happen if you took less or more beans each time? Is there a way to extend the amount of time it takes to deplete the resources? You can try doing it again with taking an increasing or decreasing amount of beans or try out your idea to extend the amount of time it takes to deplete resources. What is the advantage of using renewable resources over non-renewable resources? This activity shows the importance of conserving energy and using renewable resources because once non-renewable resources are used, they are gone.