

Modeling Natural Selection

In this activity we will use different colored beans on different colored backgrounds to model a process called **natural selection**. The activity will help us see that the environment can favor certain characteristics and cause them to become more common in a population. We will learn about natural selection later in this unit.

Materials

30 split yellow peas, 30 split green peas, 30 adzuki beans, yellow construction paper, green construction paper

Procedure

1. Place all of the seeds onto the green construction paper and spread them around making sure to mix them together.
2. Both students in the group will close their eyes for 5 seconds. After 5 seconds, open your eyes and pick up the first seed that you see and place it aside. Make sure to pick up the first one you see - don't study the seeds or try to choose in any way. Repeat this 10 times.
3. When you are done, count the seeds remaining on the construction paper and those seeds that you picked off of the construction paper. Record your observations in the data table.
4. Place all the seeds on the yellow construction paper and repeat the procedure.
5. Pool your data with the class.

	Green paper			Yellow paper		
	initial	removed	remaining	initial	removed	remaining
yellow peas						
green peas						
adzuki beans						

Questions

1. Think about the connection between the background color and the seed that survived best. Why did different seeds survive better on different colored backgrounds?
2. What would eventually happen to the population of the seeds that had the worst survival rate? Explain your answer.
3. a) Look up the definition of natural selection and then put it into your own words.
b) How does this activity demonstrate the process of natural selection?