

Phenomenal corn

Focus questions

What is the difference between the two corn plants?

How can environmental and genetic factors impact corn growth?

The purpose of this activity is to simulate selective breeding as it is accomplished by plant scientists. The Starburst® candies in the cup represent different traits that are desirable in corn to provide drought resistance. A **strong root system** is important to drought resistance since strong roots support a healthy stem and plant and make it easier for water and nutrients to enter the plant. **Seedling disease resistance** will add to drought resistance if the corn has some natural immunity to fungi, bacteria, nematodes, and root-feeding insects. One of the root-feeding insects is called rootworm, which becomes a beetle as an adult. The larvae feed on the roots during the early part of the growing season. If the corn has **rootworm resistance**, it is more likely to survive drought as well.



1. What are some differences and similarities between the two images above?

Differences

Similarities

2. What are some factors that can lead to plant growth as demonstrated above?

3. What are some ways that technology can help to mitigate poor crop growth?

Rubric for self-assessment

Skill	Yes	No	Unsure
I can identify at least 3 factors that impact the growth of plants.			
I can list and explain cause and effect relationships between environmental factors and the development of the plant.			