



Creosote Bush Genetics: Do these genes make me look big? **Middle School**

Overview

Creosote bushes are one of the most common plants in North America’s Deserts. However, the shrubs are different sizes and shapes in different locations. Students will use pressed creosote bush specimens to compare shrub size in the Chihuahuan, Mojave, and Sonoran Deserts. Activities will guide students through investigations to determine if the size difference is caused by genetics, the environment or both.

Phenomenon

Creosote bushes are different sizes in the Chihuahuan, Sonoran and Mojave Deserts.

Next Generation Science Standards

MS-LS1-5: Construct a scientific explanation based on evidence for how environmental and genetic factors influence growth of organisms.

Asombro lessons are aligned with the three-dimensional learning model of the Next Generation Science Standards.

| Science & Engineering Practices | Disciplinary Core Ideas | Crosscutting Concepts |
|---|---|------------------------------|
| Constructing explanations and designing solutions | LS1.B Growth and Development of Organisms | Cause and effect |

Common Core State Standards

ELA-LITERACY.RST.6-8.3: Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

ELA-LITERACY.RST.6-8.4: Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.

WHST.6-8.1A. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.

MATH CONTENT 7.SP.B.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability