

Plant Seed Design Challenge

Student quiz — *Answer key*

Name: _____

Date: _____

Directions: Indicate the correct answer(s) for each question below.

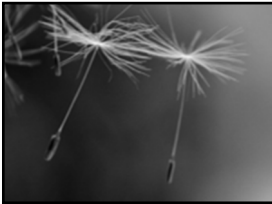
1. Below, write next to the seed image how you think the seed is dispersed.



The seeds are spread by animals



The seeds are spread by animals



The seeds are spread by wind

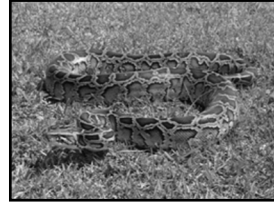
2. In your own words, explain the specific features and the function of a burr.

Plants use burrs as a mechanism of seed dispersal. A burr is a plant seed that has many hooks or spikes on the outside. These spiky features catch on the fur of passing animals that then carry the seed away from the parent plant. Once the burr falls off and falls to the ground, it can grow into a new plant.

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3. Circle below which animal a burr would most likely stick to.



4. List at least three materials that you think are best suited to build a model burr.

Examples students can list here are Styrofoam® balls, Velcro®, toothpicks, pipe cleaners, tape, etc.

5. Below, number these steps of the Engineering Design Process to bring them into the right order.

- 1 Brainstorm, evaluate, and choose a design solution that meets the specific requirements
- 3 Test the design solution
- 2 Develop and prototype a design solution
- 4 Iterate and make design changes based on your data