

GENERATION GENIUS

LESSON PLAN

POLLINATION AND SEED DISPERSAL GRADES K-2

SUMMARY

Students will explore different ways that seeds are dispersed. Duration: 45 minutes.



2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

Science & Engineering Practices	Connections to Classroom Activity
Planning and Carrying Out Investigations Analyzing and Interpreting Data	 Students will simulate how animals move seeds using their fur. Students will experiment to see how water helps move seeds from one place to another.
Disciplinary Core Ideas	Connections to Classroom Activity
LS2.A: Interdependent Relationships in Ecosystems Plants depend on animals for pollination or to move their seeds around. (2-LS2-2)	 Students will investigate how seeds attach to the fur of animals by using Velcro. Students will also investigate how water can help seeds move from one place to another.
Crosscutting Concepts	Connections to Classroom Activity
Structure and Function	 Students will discover that seeds are structured in such a way that helps them move from place to place.

Link to Video



Show students a lint roller and ask "Have you ever seen or used one of these?" Most students have probably seen or used one. Ask what they are used for. Students should respond with "to get dog fur off clothes or furniture" or "to get lint off clothes". Next, ask students how the lint roller works. Have students share ideas. To segue into the lesson, tell students that in nature, pollen and seeds can stick to animals which helps those things get moved around.

EXPLORE

MATERIALS

- Lint roller
- Velcro (To be cut into small pieces.)
- Felt
- Scissors
- Tub of water
- Sunflower seeds

DIY Activity (per group)

- Paper
- Scissors
- Pencil
- Paper clip

Tell students that today they will be investigating how plants move seeds from one place to another. Students will be conducting two experiments at two stations.

<u>Station 1:</u> Students will sprinkle Velcro 'seeds' onto their table or desks. They will then use a piece of felt to pick up as many seeds as they can by tapping the area where the seeds are. Once they have collected the seeds, they will move to another part of the room and try to shake/pull some of the seeds off of the felt.

Station 2: Students will float some sunflower seeds at one end of a tub of water. They will then gently blow on the seeds to move them to the other side of the tub.

EXPLAIN

To begin the explanation, have students share what they discovered at each of the stations. Prompt with questions to get the discussion going:

<u>Station 1:</u> What happened when you tapped the felt over the seeds? How many seeds were you able to pick up? How did you get the seeds to come off the felt? How is the felt like the fur of an animal?

Station 2: What happened to the seeds when the water started moving? How would the seeds get to land and start to grow? Do you think a seed could travel very far in water?

Tell the students that today we just investigated how some seeds move from place to place. This is called seed dispersal. Can you think of any other ways that seeds might travel from place to place?

ELABORATE



WATCH THE GENERATION GENIUS POLLINATION AND SEED DISPERSAL VIDEO AS A GROUP

Then facilitate using the Discussion Questions.



Students can play the online Kahoot! quiz game located below the video which provides downloadable scores at the end of the quiz game. Alternatively, you can use the paper quiz or the exit ticket questions. All these resources are located below the video in the Assessment section.



Seed Expulsion Challenge: Give each group of students one balloon, ¹/₄ cup of tiny bird seeds and a funnel. Ask the students to design and construct a model of a plant that disperses its seeds through expulsion. This activity is best done outside so that you don't have to clean up the birdseed. Be sure to clean up the pieces of popped balloon.

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