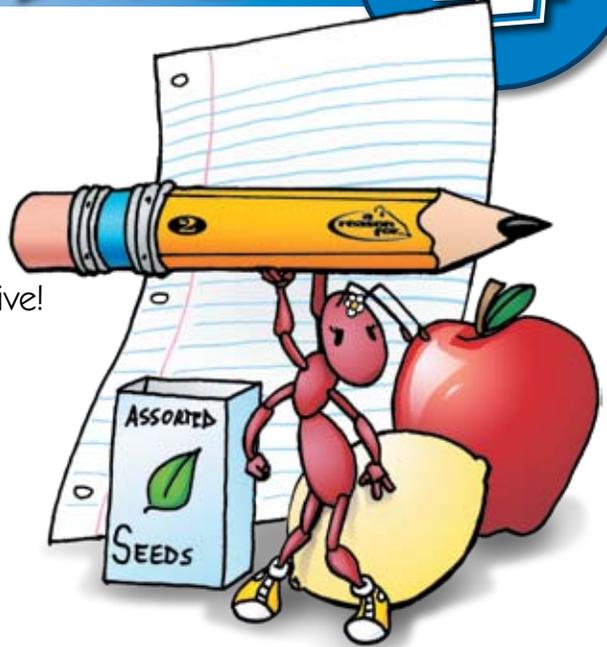


SPECIAL DELIVERY

FOCUS Seed Dispersal**OBJECTIVE** To explore ways plants spread seeds**OVERVIEW** Plants use seeds to reproduce. But if the seeds all landed in the same place, they couldn't survive! In this activity, we'll explore some ways that plants spread their seeds around.

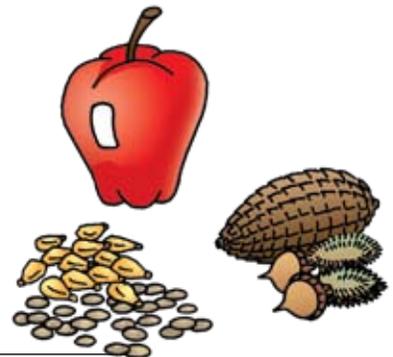
WHAT TO DO

STEP 1



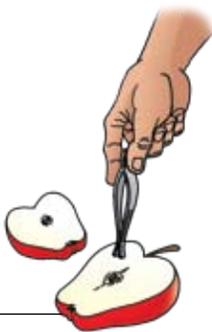
Open your seed bags and **place** the contents on the table beside the apple. Carefully **observe** each item and **make notes** about what you see.

STEP 2



Each of these items contains plant seeds in some way. With your research team, **discuss** different ways you might group the items based on their similarities and differences.

STEP 3



Watch as your teacher cuts your team's apple in half. **Examine** the inside of the apple closely, then **find** and **remove** the seeds. **Discuss** what you see with your research team. (Remember, good scientists don't EAT their experiments!)

STEP 4



After making notes, **dispose** of your apple as the teacher directs. **Place** all the other seeds back into the container. Based on what you have observed, **predict** how each of the "seed packages" you've examined gets "delivered." **Discuss** your ideas with your research team.

? WHAT HAPPENED?

If a plant's **seeds** all landed in the same place, there wouldn't be enough **water**, **nutrients**, or **light** to go around. Most would die! That's why plants use many different methods to spread their seeds. This gives the **embryo** (baby plant) in each seed a much better chance of becoming a mature plant.

Some plants rely on **wind** to spread their seeds. They may produce very light seeds (ash tree), "parachute" seeds (milkweed), or even seeds with wings (maple). Some plants rely on **water** to spread their seeds. They produce seeds that float (coconuts) or wash away in heavy rains (grasses). Some plants even rely on the **movement** of animals to spread their seeds. They may produce edible **fruit** (berries), or tiny hooks (cocklebur) to grab a ride.

? WHAT WE LEARNED

1

Describe the items from the seed bags in Step 1. How many kinds were there? How many of each? How were they similar? How were they different?

2

Describe the groups your team made in Step 2. What characteristics did you use to sort the seeds?



**What is the baby plant inside a seed called?
Name three things that it needs to survive.**



**List three different methods plants use to disperse their seeds.
Give an example of each.**



**A plant produces many more seeds than it needs to replace itself.
Based on what you've learned, why is this necessary?**
