

Scenario Card #1

Apple trees need water to survive and to grow healthy fruit. When it's hot out and hasn't rained, we need to give them water. Farmers water their trees by using irrigation systems. Do you have irrigation?

- a. Yes, students keep their irrigation card.**
- b. No, students lose one apple.**

Discussion: Irrigation is the application of controlled amounts of water to plants at needed intervals. Farmers use irrigation systems to help their plants grow and stay healthy. There are many types of irrigation systems.



Scenario Card #2

Sometimes bugs will damage fruit trees by eating the leaves or fruit. Farmers often prevent bugs from damaging their crops by spraying an insecticide, also known as crop protection. Do you have crop protection?

- a. Yes, students keep their crop protection card.**
- b. No, students lose one apple.**

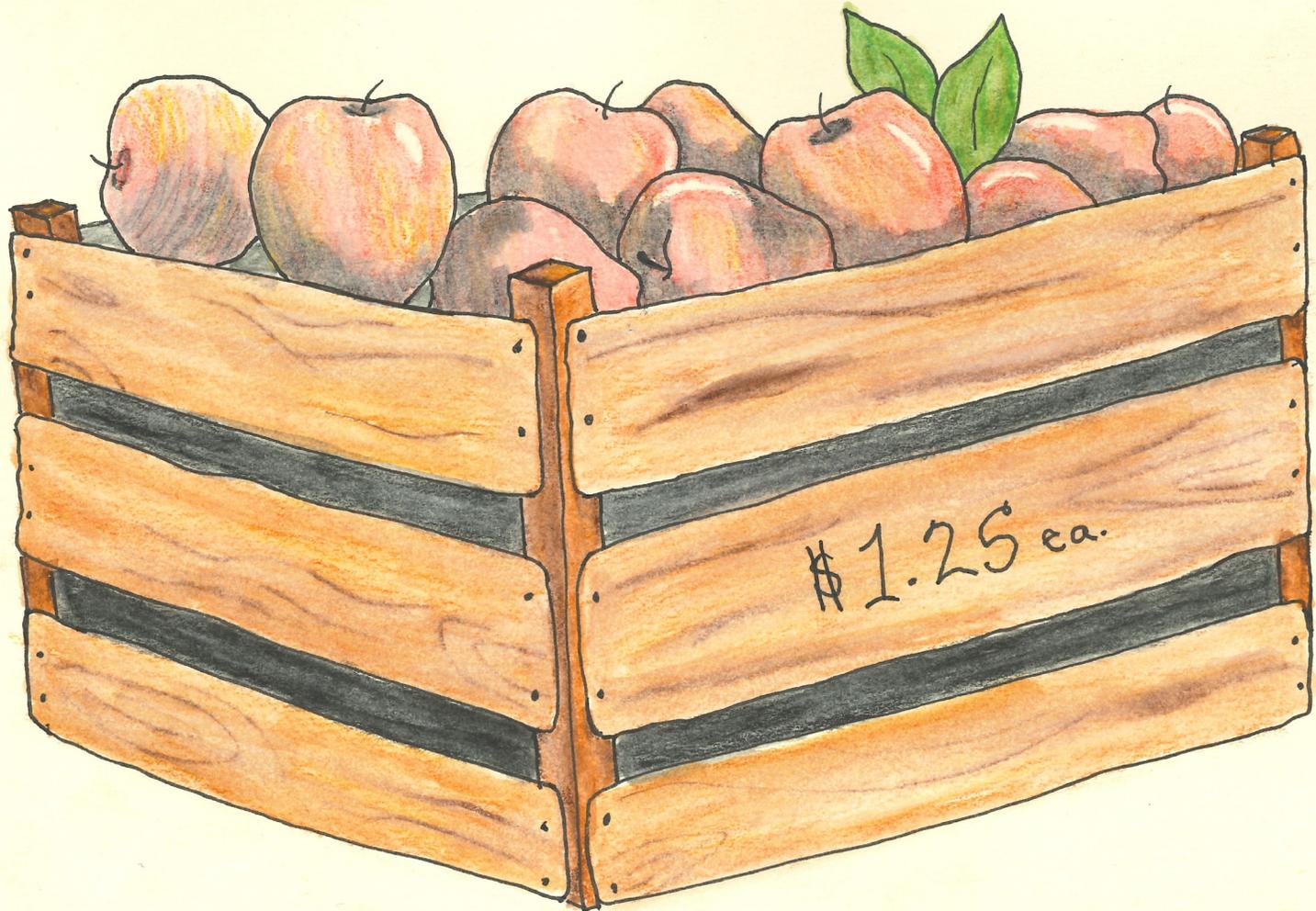
Discussion: Sometimes farmers need to use insecticides to fight off bugs that are damaging their plants. Farmers often work with an agronomist or “plant doctor” to make decisions on what type of treatment to use.



Scenario Card #3

The price of apples can go up or down in a given year depending on the market. The price of the apple variety you grow is normally \$1.00 per pound, but the price suddenly rose to \$1.25 per pound.

Everyone gains one apple!



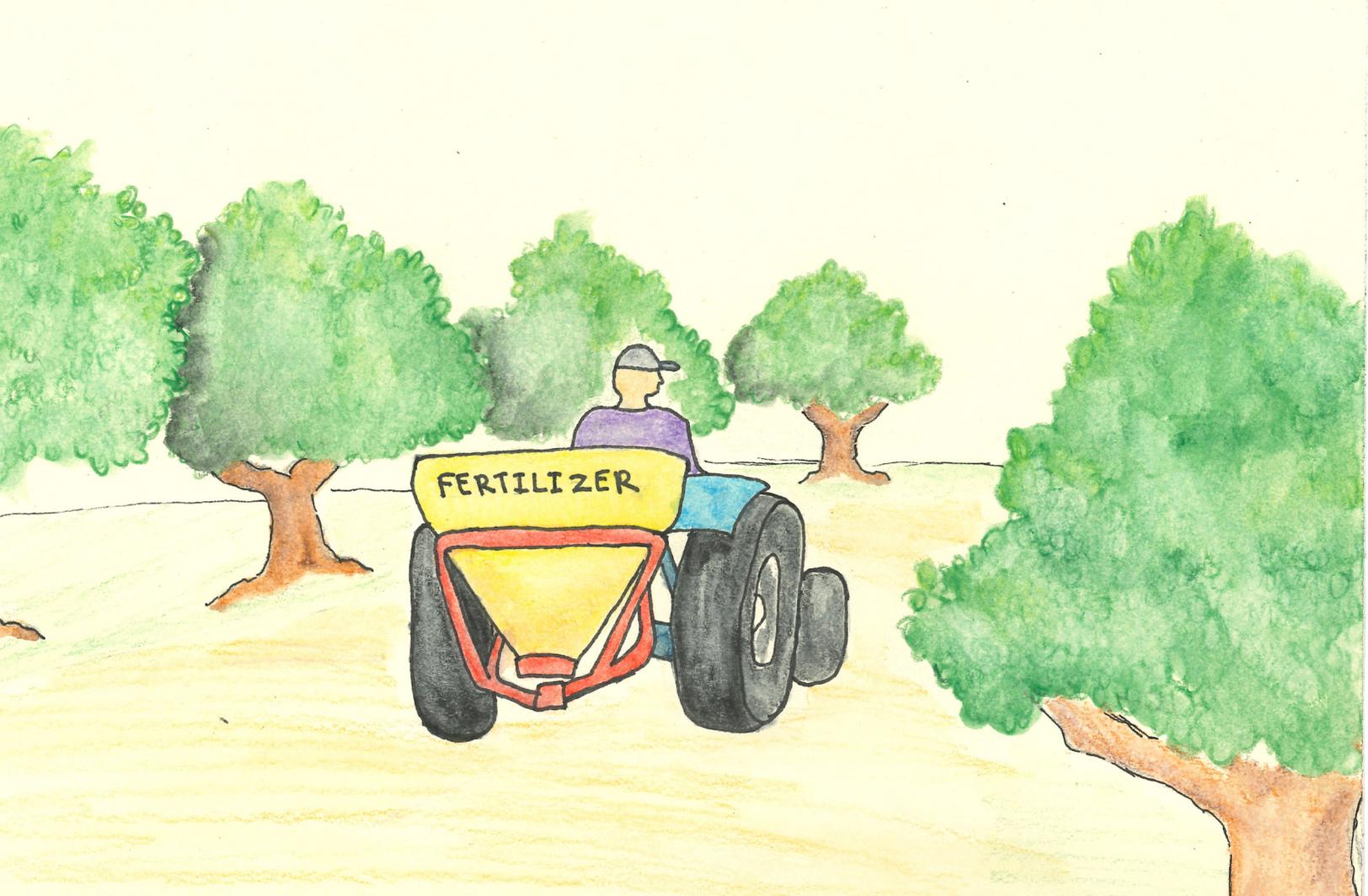
\$1.25 ea.

Scenario Card #4

The type of nutrients in the soil are important for the trees in an orchard. When nutrient levels are low, we need to add nutrients. Farmers will do this by adding fertilizer. Do you have fertilizer?

- a. Yes, students keep their fertilizer card.**
- b. No, students lose one apple.**

Discussion: There are many different types of fertilizers used on farms to provide the soil with nutrients. Fertilizers help improve growth and productivity of plants. Farmers will make the decision of which type of fertilizer to use based on their plants' needs and farm style.



FERTILIZER

Scenario Card #5

(This scenario is for grades 3-4 only)

Farmers make decisions every single day that will impact their farm. Now it's your turn to make a decision for your farm. It's spring time and has been raining for two weeks straight. Do you want to plant your apple trees now or wait?

Allow the groups to discuss. Once they've reached a decision, ask each group to share what they decided.

- a. Wait to plant, nothing happens.**
- b. Plant now, lose one apple.**

Discussion: Trees need water to survive, but if the ground is too wet, the trees will not be able to anchor their roots. Trees can fall out of the ground if you plant when it's too wet.



Scenario Card #6

Fruit trees lose their ability to withstand cold temperatures in the spring when their buds start to bloom. When frost is in the weather forecast, farmers can use wind turbines to circulate the air and prevent trees from being damaged by frost. Do you have a wind turbine?

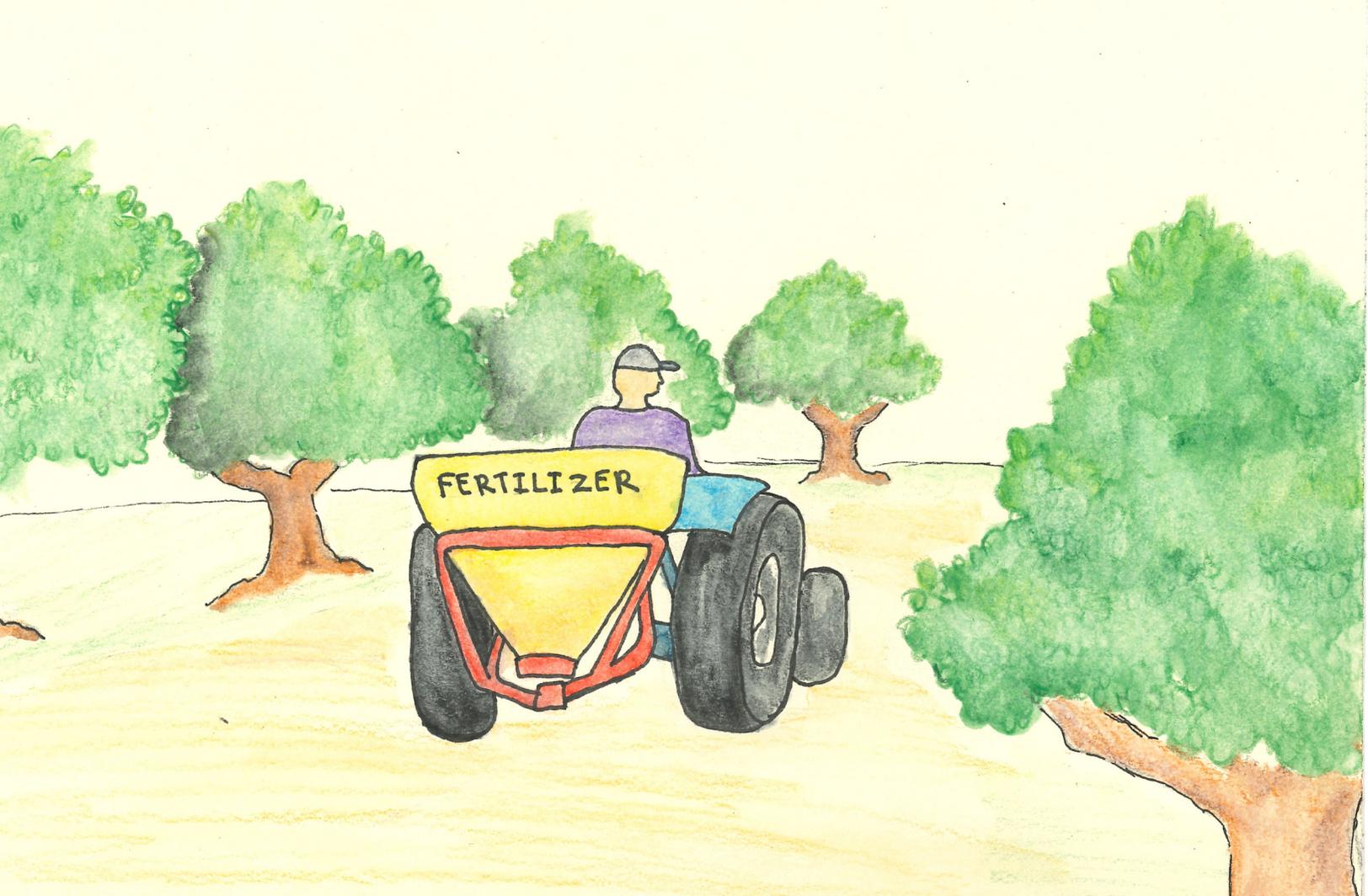
- a. Yes, students keep their wind turbine card.**
- b. No, students lose one apple.**



Scenario Card #7

As we discussed earlier, plants need nutrients to grow and produce fruit. Farmers often fertilize their ground throughout the year to ensure their plants will have proper nutrients. Do you have fertilizer?

- a. Yes, students keep their fertilizer card.**
- b. No, students lose one apple.**



FERTILIZER

Scenario Card #8

Sometimes it is difficult for farmers to find workers during harvest. When there are not enough workers to pick the fruit produced by the trees, apples will be left in the orchard. This causes farmers to lose money and food to go to waste.

Everyone loses one apple.

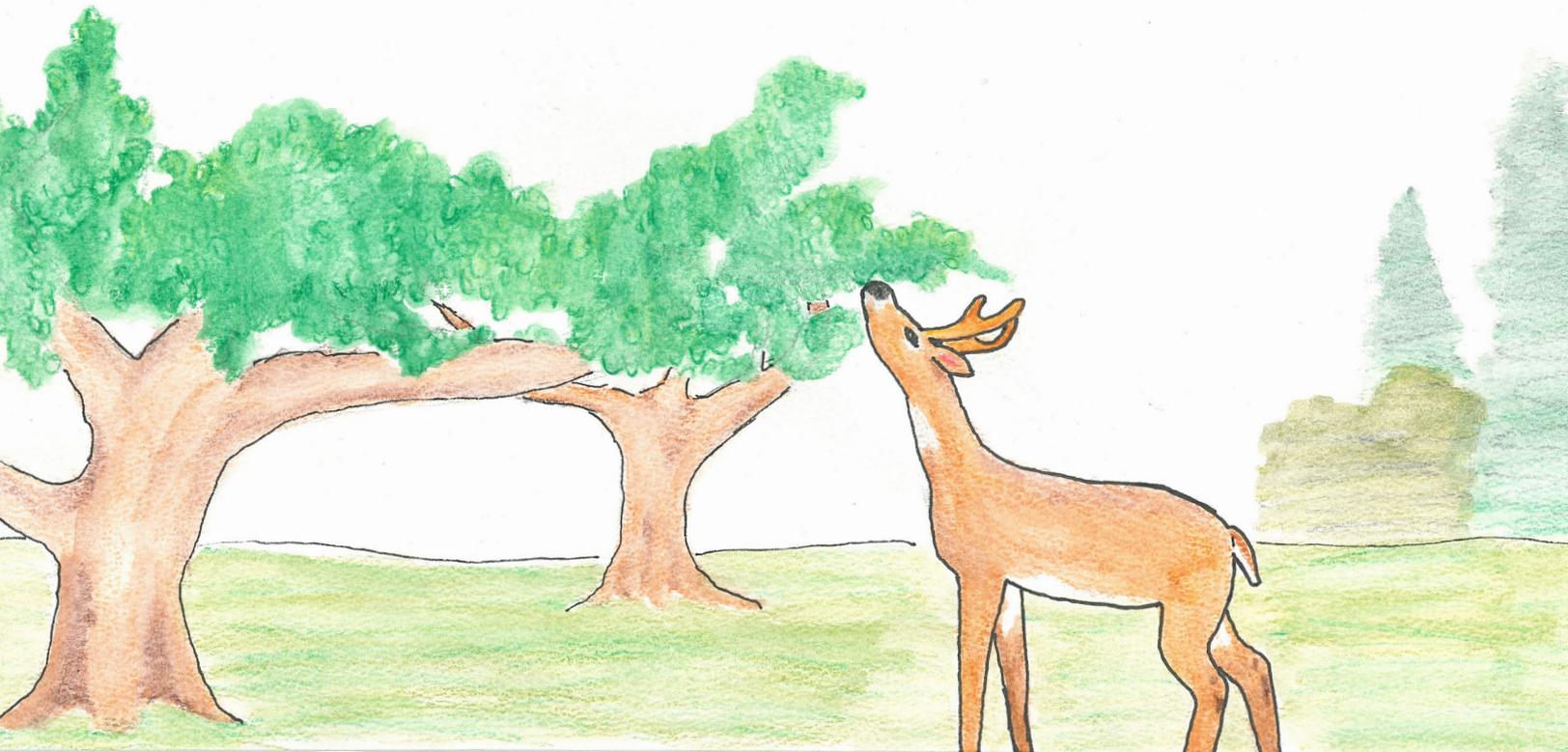
Discussion: Farm workers have an extremely important role in the agricultural industry. They help get our food from the farm to the table. When there aren't enough workers available to plant or harvest crops it can impact our food system.



Scenario Card #9

Deer can damage apple trees by eating the fruit or rubbing their antlers on the young trees. Farmers use fencing to keep deer out of the orchard. Do you have fencing?

- a. Yes, students keep their fencing card.**
- b. No, students lose one apple.**



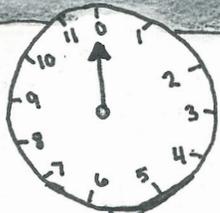
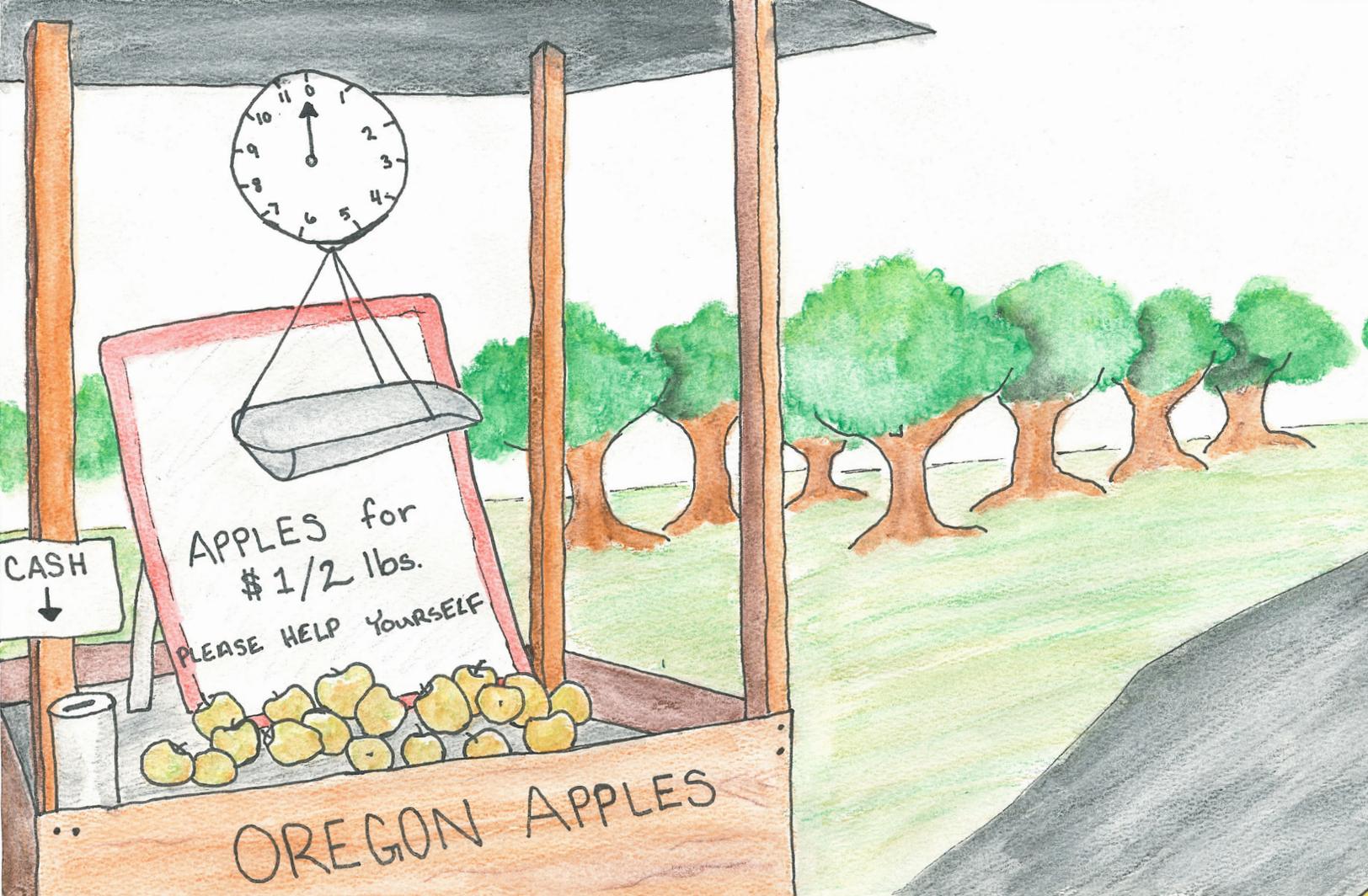
Scenario Card #10

(This scenario is for grades 3-4 only)

Companies and farmers use creative marketing techniques to get people (consumers) to purchase their product. Can your group think of a creative name for your apples to market them?

Have groups take a couple minutes to think of a creative name for their apple variety. Let each group share the name they chose.

The group with the most creative name gains one apple!



APPLES for
\$1/2 lbs.
PLEASE HELP YOURSELF

CASH
↓

OREGON APPLES

Scenario Card #11

Farmers usually send their apples to a processing facility after harvest (unless they are being sold at a farmer's market or fruit stand). At the processing facility, apples are cleaned, stored and shipped. Processing facilities may raise their rates from year to year. When this happens, you will lose money.

Everyone loses one apple.



Scenario Card #12

Weeds can harm plants because they compete for water and nutrients. Farmers often use crop protection (herbicides) to get rid of weeds. Do you have crop protection?

- a. Yes, students keep their crop protection card.**
- b. No, students lose one apple.**



Scenario Card #13

(This scenario is for grades 3-4 only)

You have the opportunity to plant a pollinator habitat on your farm. Pollinator habitats provide homes for beneficial insects, like honey bees. Apple trees are pollinated by honey bees, and farmers usually have a beekeeper bring honey bees out to the farm to pollinate crops. Do you want to plant a pollinator habitat on your farm?

- a. Yes, students gain one apple.**
- b. No, nothing happens.**

Discussion: Pollinators are responsible for one in every three bites of food we eat. They play a significant role in the production of many of our crops. By creating a pollinator habitat on the farm, we are benefiting our beneficial insects and ourselves!

