Description:
Throughout the years, farmers have dealt with a wide range of challenges. In this activity students will experience the challenges of modern-day farmers through a simulation card game. Students will discover the work required and choices made for the food they eat.

Setting the Stage: Read a Book
An age-appropriate book from the list is a perfect way to begin this lesson. *Apples to Oregon* is a great choice because students can draw parallels between challenges that the pioneers faced and those faced by farmers today.

The Apple Farming Game
1. Divide students into three groups (for grades K-2) or five groups (for grades 3-4). Each group will receive five apple cards to start.

2. Depending on the age and abilities of the students, assign or have students choose their playing cards for the game. The playing cards are irrigation, fertilizer, crop protection, wind turbine and fencing. Each group is allowed to select three cards. Explain each of the playing cards before having students choose or distributing them randomly.

   - **Irrigation**: Trees need water to grow and produce fruit. Newly planted and young trees require more water than older, well-established trees.
   - **Fertilizer**: Trees need nutrients to grow and stay healthy. Fertilizer is used to supply the soil with nutrients.
   - **Crop protection**: Crops and trees are often affected by weeds, insects and diseases. Crop protection will help protect your orchard from weeds, insects, and diseases.
   - **Wind turbine**: The buds on apple trees can be damaged by frost if they are blooming when low temperatures occur. Wind turbines are used to circulate air and prevent trees from being damaged by the frost.
   - **Fencing**: Deer and elk like to visit orchards to eat the fruit on trees or rub their antlers on them. Fencing helps protect orchards from deer and elk.

3. Explain that there will be different types of scenarios read aloud to the class. Students will be able to use their playing cards for some of the scenarios, but not all. For older students, there will also be opportunity for decision making and creativity. Depending on the scenario read, groups may lose an apple, gain an apple, or have nothing happen. Remind students to listen carefully as each scenario is read. If a group loses an apple, it will need to be discarded. Decide beforehand how you will have students choose or distributing them randomly. If possible, would you have chosen all of the playing cards? Why might that not be realistic?

4. Read all thirteen scenarios to the class. The game will end once all scenario cards have been read. The winner is the group with the most apples remaining.

Wrap Up: When the activity is complete discuss the activity and what the students learned. Consider asking:

   - What did you learn from the activity?
   - Do you think these types of scenarios happen to farmers?
   - Do you think farmers have a lot of decisions to make every day?
   - Why do you think some groups finished the game with more apples than others?

*Grade Level*: K - 4  
*Essential Skills*: 4, 5, 9  
*NGSS*: K-ESS2-2, K-ESS3-2-3  
*CCSS*: K-1.RL.1, K-1.3, K-1.7, SL.2.2, 3-5.SL.1  
*Social Sciences*: K.1, K.20, 1.2, 1.20, 4.3, 4.13  
*Time*: 45 minutes

*Materials:*
The Apple Farming Game Kit*  
Kit includes:
- 30 apple cards  
- 30 playing cards (6 of each)  
- 13 scenario cards

*Free kit with all materials available to Oregon educators from our Free Loan Library.*

AITC Library Resources:
Check out these materials online at AITC’s Lending Library:

- **Books:**
  - *Apples of Your Eye*
  - *Apples Grow on a Tree*
  - *Johnny Appleseed*
  - *Up, up, up! It’s Apple Picking Time*
  - *Apples*
  - *Apples to Oregon*

*[aitc.org](http://aitc.org)  .  Oregon Agriculture in the Classroom Foundation  .  541-737-1318*