

## Lesson 1: Sustainable Agriculture

## Self-Guided Experience

Use the steps below to navigate through the Journey 2050 Self-Guided Experience.

Begin the <u>Journey 2050 Lesson 1: Self-Guided Experience</u> video. You will hear a brief introduction to this lesson as well as the Journey 2050 program.



Watch the <u>Journey 2050: Introduction video</u>. As you watch, record the answers to the following 3 questions



1- Why is 2050 a significant year?

2- What is the "sustainability barrel?"

3- What is the "ripple effect?"

Watch the <u>World Population</u> video animation to begin to visualize the rapid growth of the world's population in comparison to historical eras.



List 2 reasons why you think the world population has grown so rapidly since the early 1900s. What is your best guess?

1\_

2-

Watch the <u>7 Billion: How Did We Get So Big So Fast?</u> video.

What 2 advances have helped to slow the death rate and therefore allowed the world population to rise?



1\_

2-

- Return to the <u>Journey 2050 Lesson 1: Self-Guided Experience</u> video. ("Step 5" chapter marker)
  - 1- How many years until the year 2050?
  - 2- How old will you be in 2050?
- 6 Play Level 1 of the Journey 2050 Sustainability Farming Game. The game can be downloaded to devices from Google Play or the App Store. It can also be played online using Chrome, Safari or Firefox.



- Finish the <u>Journey 2050 Lesson 1: Self-Guided Experience</u> video (Step 7 chapter marker). Then, answer the questions below and review the key points.
  - 1- After growing your first crop, did you invest some of your money to purchase additional land? Why or why not?
  - 2- What was your limiting factor in your sustainability barrel? What did this mean?
  - 3- What were some of the ripple effects of your farming choices?

## **Key Points:**

- By 2050, it is expected that our world will grow from over 8 billion to nearly 10 billion people.
- Sustainable agriculture is the practice of producing our food, fiber and fuel in a way that is profitable to the farmer, supports a healthy quality of life and protects our natural resources (land, air and water).
- Many factors can limit our ability to produce food for a growing population. These limiting factors are depicted in the sustainability barrel.
- Using sustainable agricultural practices can improve our society through the ripple effect.

