Name: _____

Lesson 3: Water

Self-Guided Experience

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

1. Begin the **Journey 2050 Lesson 3: Water | Self-Guided Experience** video. You will hear a brief introduction to this lesson.

2. Watch NASA's **Show Me the Water** video.

   1- How much of Earth's water is in the ocean?

   2- What percentage of freshwater use goes to agricultural irrigation?

3. Watch the **Journey 2050: Water** video.

   1- How is water used in agriculture?

   2- What methods do farmers use to irrigate their crops?

   3- What best practices can be implemented to use water more efficiently in agriculture?

4. Continue the **Journey 2050 Lesson 3: Water | Self-Guided Experience** video. ("Step 4" chapter marker)

   1-What do farmers need to grow a crop?

5 Play Level 3 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.

6 Finish the **Journey 2050 Lesson 3: Water | Self-Guided Experience** video. Then, answer the questions below and review the key points. ("Step 6" chapter marker)

1- What were your limiting factors?

2- Did you find it difficult to have enough water for your crops? How did weather impact your crops?

3- What ripple effects did you notice from your investments?

Key Points:

- Water is a natural resource critical to agriculture.
- Although the majority of the Earth is made up of water, only a small fraction is actually usable.
- Farmers improve their water efficiency by using water conservation practices and technologies such as irrigation (with moisture sensors), conservation tillage and riparian areas.
- Some regions of the world face greater threats to their water supply than others.

Additional Activities:

- Watch **What is a Watershed?** and **Why Should You Care About Our Watersheds?**
- Brainstorm ways you can conserve and protect water.
- Find a map of your local watershed and learn where water flows from and to in your area.
- Research which countries have the least and the most available freshwater. Discover what factors impact water availability and daily water use. Use the **FAO website** for resources.