

Virtual Seed Survivor

Lesson - Sunflower Microgreens

Parent Guide



Explore what it takes for seeds to survive, thrive and provide us with healthy nutritious food.

Background

Seed Survivor educates elementary students, with a focus on grades 3-4, about the importance of agriculture and where food comes from. All materials in Seed Survivor are created in collaboration with teachers and agriculture experts to ensure they are unbiased, curriculum-based and factual. Every presentation explores how to grow healthy plants, the components and importance of soil and how much of the earth can grow food. Students have a chance to play games and plant seeds to grow at home!

In this lesson students will:

- Identify what plants need to grow
- Describe the components of loam soil
- Understand how precious and finite soil is on our planet
- Describe the 3 macro-nutrients for plants, where they come from and how they help the plant grow and stay healthy
- Plant, care for and harvest microgreens

Suggested time needed:

80 minutes+

10 minutes – Seed Survivor pre-activity

20 minutes – Seed Survivor presentation, planting activity and video questions (plus set-up time and planting time)

10 minutes – Post-presentation crossword puzzle

30 minutes – Seed Survivor games and website exploration (individual)

10 minutes – Seed Survivor post-activity

Materials to be provided by you, the parent:

- One tablet, laptop or desktop computer with internet connection to complete online learning games and activities.
- A Seed Survivor cup or similar small container (about 750mL or 12oz).
- Soilless potting soil*
- Sunflower microgreen seeds**
- A tablespoon

***Please see note below regarding food safety and best practices in the Food Safety section below.**

**** If you are completing this as a homeschool activity Nutrien is happy to send you microgreen seeds to ensure food safety. Please email your request to Community.Investment@nutrien.com**

Food Safety:



When growing microgreens in-class or at home, there are a few best practices to keep in mind.

- Please use the microgreens provided to you to ensure food safety.
- Start with a clean Seed Survivor cup or container. If using a growing tray disinfect and sterilize all growing trays between use. We recommend using a 9:1 solution of water and either bleach, white vinegar or a school-approved alternative to clean, and then rinse with plain water to remove disinfectant residue.
- Ensure that soilless potting mix is used, and clean tap water. Always store potting mix indoors to limit potential contamination.

Harvesting in-class or at home

- Wash hands thoroughly with soap and water before and after handling, harvesting and eating the microgreens.
- If harvesting using scissors, we recommend cutting the microgreens 2cm above the soil line, using clean, sharp scissors. Scissors should be disinfected before and after using a 9:1 solution of water and disinfectant (bleach, white vinegar or a school approved alternative) and rinsing with plain water.
- Prior to consumption, the microgreens should be placed in a mesh colander and rinsed with clean, cold water and patted dry with clean paper towel.
- It is always best to enjoy microgreens immediately after harvesting. If it is necessary to store them, ensure that they are harvested when dry. They can be wrapped loosely with paper towel and refrigerated in a plastic bag. Make sure to rinse microgreens and ensure they have not spoiled before eating.

***Please note:** microgreen seeds are provided for educational purposes. Germination and yield are dependent on many factors, and are not guaranteed. As with any food grown in the classroom or home environment, there are potential food safety risks. To help minimize these risks, please ensure that you have followed all instructions for growing and harvesting microgreens and that the microgreens are not contaminated, moldy or otherwise spoiled prior to any consumption.

Student Activity preparation:

1. Provide your student with the planting materials:
 - A cup or a similar container (about 750 mL or 12oz).
 - Soilless potting soil
 - Sunflower microgreen seeds (10)
 - A tablespoon
2. Provide your student with a device connected to the internet. Have them open the interactive **Seed Survivor for Students - Sunflower Microgreens** lesson sheet. If using printed versions of the activities, have your student complete the pre-activity first and then supply the Student Lesson.
 - The interactive lesson sheet will provide them with a step-by-step guide and all links to download the online materials needed to complete the Seed Survivor Sunflower Microgreens lesson.
 - **Note:** this activity sheet and the video can also be accessed from the **Sunflower Microgreens** option on Virtual Seed Survivor Presentation page under the "Just for Teachers" tab on the Seed Survivor website www.SeedSurvivor.com. There are print options of all activities if preferred.



For your information at 4:10 in the Virtual Presentation video directions are given for planting the microgreen seeds. Here are the step-by-step instructions as presented in the video if needed:

- Fill your cup 3/4 full with nutrient rich soil
- Place seeds on top of the soil. Ensure the seeds are spread out as much as possible so there is lots of room for the roots to grow!
- Poke each seed into the soil with one finger (about 1/2-1" down) and ensure seeds are covered with soil
- Place your cup in a sunny window
- Add approximately one TABLESPOON of water each day or enough to keep the soil moist (should feel like a damp sponge)
- Microgreens are ready to be harvested when the first leaf pair opens – about one week after planting. To harvest, cut/break off the microgreen above the soil with clean scissors or fingers, or pull them from the soil to eat whole – roots and all!
- Rinse away any soil and enjoy microgreens on their own, on a salad or in a sandwich.

** Find more tips, growing advice or submit your sunflower pictures on www.SeedSurvivor.com*

Additional Resources:

For Students:

Go to <http://seedsurvivor.com/>. Students can explore these resources under the "Just for Kids" tab:

- Kids videos
- Nutrient world (learn more about NPK)
- Recipes
- Growing Advice
- Online coloring
- Ask the Agronomist

For Parents:

Go to <http://seedsurvivor.com/> and look under the "Just for Teachers" tab for:

- More e-learning activities
- Videos
- Posters
- Resources to learn more about agriculture

Feedback

We welcome your feedback! Each year Seed Survivor makes improvements based on the feedback received. Please complete a short questionnaire linked [here](#) or available on the virtual presentation page.

For questions, or any further feedback please email:

Community.Investment@Nutrien.com

Have fun watching your sunflowers grow!