

Mountains to Sound Greenway Trust

Next Generation Stewards

Sprouting Seeds

In the first four videos in this series, we talked about the four abiotic components that determine what kinds of organisms can thrive in an ecosystem. Those components are light, air, water, and soil. Now, we're going to explore the biotic parts of the ecosystem, starting with where all the energy of the starts in the ecosystem: the plants! We call plants **producers** because they use a process called photosynthesis to produce, or make, their own energy using sunlight, air, and water. We can be stewards of producers by removing invasive plants and planting native species. Watch the full video, including photosynthesis explained using LEGO bricks: https://youtu.be/ITbQLcOuvC4.

Materials:

- Seeds! You might use seeds from a fruit or vegetable in your kitchen (e.g. apple, bell pepper, dry beans) or in a seed packet leftover from a gardening project.
- Plate
- Bandana (or paper towels or a cloth napkin)
- Resealable plastic bag
- Sit spot journal

How to do this activity:

1) First, get your materials ready. Collect 1-5 of a few types of seeds and put them on a plate. Get your bandana wet and then wring it out so it is damp. Fold it into quarters.

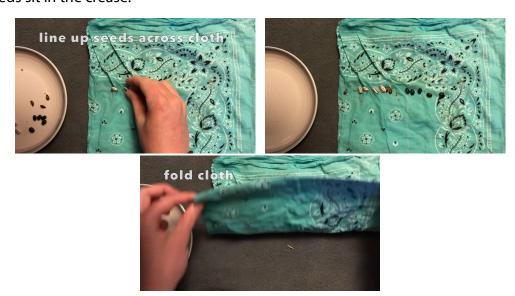




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2) Put your seeds in a line across the middle. Then, fold the bandana in half so that the seeds sit in the crease.



3) Put the whole thing into a resealable plastic bag, and then seal it so that the water from the bandana/paper towels can't get out.



- 4) Put the plastic bag somewhere you will remember about it. For example, you might leave it on a table in your bedroom or even tape it to a window like we did with the Water Cycle in a Bag activity.
- 5) Check on the bag a couple times a day. If the bandana starts to dry out, re-wet it by dripping a little water into the bag. Questions to consider in your sit spot journal:
 - o How long did it take for your seeds to sprout? Which ones sprouted first?
 - Did the stem and root all come out in the same direction? Did they end up going in the same direction?
 - O What other observations did you make?
- 6) While you wait for your seeds to sprout, see if you can find any seeds or seedlings (baby plants) at your sit spot. What do they look like? How many leaves do they have, and what shape are they? How much do they grow each day? Record your observations in your sit spot journal.
- 7) We invite you to share your observations and/or a photo of your seeds with us! Email us at education@mtsgreenway.org, and we may share it on our social media.

