



PROGRAM

Sprouting a Potato

photos from pre-kpage.com

Time Required:	Materials Needed:
20 Minutes for Initial Set-up 5-10 minutes a few times a week after	Clear container, water, toothpicks (4 per person), knife, potato or sweet potato (1 per 2 people), sunlight, paper, pen/pencil

Brief Description of Activity:
Participants will grow sprouts from a half-cut potato in water. Participants will make predictions (hypothesis) on what will happen, measure the growth of the sprouts, and in the end be able to plant the potato in soil or outside to see if it will continue to grow.
Kid-Friendly Purpose of Activity:
<i>Plants grow from seeds, but we are going to see if we can grow a plant from a potato! We will be making guesses as to what will happen and use math to measure to see if we can grow anything. This will take a few weeks to see if results happen so we will check on the potato a few times a week!</i>

Step-by-Step Guide:
<ol style="list-style-type: none"> 1. The adult should use a knife to cut the potato in half (older youth can cut the potato if adult is supervising and comfortable with it). 2. Ask youth what a plant needs to live. -water, sun, and carbon dioxide 3. Have the participants fill a clear container with water. The container should have a big enough hole for the potato to fit through the hole, a mason jar or Tupperware type product works best. 4. Insert the 4 toothpicks into the middle of the potato. You want to position them so that the cut side of the potato is submerged 1-2 inches in the water. The toothpicks will hold the potato upright and allow the water to circulate under the bottom. 5. Have the participants create a journal and write in their hypothesis of what will happen to the potato. Explain what a hypothesis is to younger youth. 6. Place your potato in a sunny location and check on the water regularly, refill water as needed. 7. Participants will check on potato every other day and write down observations and can measure any growths that occur. 8. Once roots have grown and potato has sprouts, youth can transfer to a pot with soil or plant outside if desired.

Thrive it UP!
<ul style="list-style-type: none"> - Have your group talk about plants and how they grow! Go in depth on the different parts of plants.

Reflection

- How did the potato do? Did it grow?
- Could something have effected the growth of the potato or could you have done something different?
- Think about what plants need to grow. You can try the experiment again with different aspects (check below)

Level Adjustments

- Older participants can make it into more of a science experiment and grow multiple potatoes while changing one aspect to each. They could have 3 potatoes, one in sun, one in partial sun, and one in the dark, or they could change the liquid uses, for example one with water, one with salt water, and one with juice or soda. They will take measurements of growth, graph the growth, and write down their observations.
- Have older youth in adventure or above go over the scientific method, which can be found here: <https://www.colorincolorado.org/article/steps-scientific-process>

Additional Notes

- This project will only take a few minutes a day but is a longer-term project that the participants will be able to observe and watch for a minimum of 4 weeks.
- You can also add more, like having young youth write a story about their potato!



