Grow A Sweet Potato!

Lesson summary:
Sweet potatoes are easy to grow from a tuber and a good way for children to learn about roots and shoots.

What’s the big idea?
- Seeds are not the only way to grow a vegetable. Some plants like sweet potato can be grown from a tuber.

Outcomes or purpose:
- Children learn that some plants, like sweet potatoes, are grown from tubers instead of seeds.

Teacher background:
If you want to grow tomatoes, beans, cucumbers or most other vegetables, you plant the right seeds. So what do you plant when you want to grow sweet potatoes? The answer is not a seed, but another sweet potato! A sweet potato is actually a type of root called a tuber. Tubers are big because they store water, sugars and nutrients to use when conditions are not good for them to grow, such as during a dry spell.

Materials needed:
- Clear plastic or glass container
- Water
- Toothpicks
- Knife
- Cutting board
- Sweet Potato
- Sunlight
- Ruler
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Step by step instructions:

1. Cut the sweet potato in half.

2. Fill the clear container about ¾ full of water.

3. Insert 4 toothpicks into the middle of your sweet potato half. Position your toothpicks so that 3 - 5 cm of the cut portion of the sweet potato is in the water when you place it in your container.

4. Place your sweet potato in a sunny window.

5. Check it every day. If the water level drops, add more water. Be sure to change the water completely 2 or 3 times a week to keep the water fresh.

6. Roots should start to grow in the water in 2 to 3 weeks. Sprouts (stems with leaves) will start to grow in about 3 - 4 weeks.

7. Sprouts can grow really fast once they start. Measure and keep track of how much your sprouts grow.

8. Optional: You can plant your sweet potato sprout in the garden when the soil is warm. At the end of the summer, dig up the plant. You should find more sweet potatoes!

Discussion questions

• Make drawings of your sweet potato experiment. One drawing when you start growing your sweet potato, another in 3 weeks and the last one in 6 weeks. What differences do you notice?

• Another way to track the progress of your sweet potato is to take pictures.

• If you plant the sprouted sweet potato in your garden, make note of how many new sweet potatoes it produces.

Expand the learning:

• Have a sweet potato growing contest with your brother or sister. Measure which one grows the longest shoots!

• Learn more about sweet potatoes by researching them on the internet. Where do they originate? How are they traditionally used? What is a good way to grow sweet potatoes in the garden? Are there any good stories about sweet potatoes?

• Find sweet potato recipes on the internet and try a new recipe with your family. Do you have a favourite way to eat sweet potatoes?

• Try this experiment with regular potatoes. Do some research into how gardeners grow potatoes in the ground. If you cut a potato into many pieces, will it grow into several new plants? Are some parts of the potato more important than other parts for growing new plants?