Do plants really need soil? (II)  Demonstration/Activity
Mission 3

Objectives
To grow a tuber from an existing tuber
To think about the role of soil in the different stages of plant growth

Initial Questions
What are the different ways that new plants are generated?

Materials
• A sweet potato that shows signs of sprouting or eye spots
• Several wooden toothpicks
• A glass jar
• Water
• Flower pot & potting mix for transplanting

Procedure
1. Insert toothpicks around the middle of the sweet potato.
2. Balance the potato, pointy (root) end down, over the mouth of the jar using the toothpicks to hold it on the rim of the jar.
3. Fill the jar with lukewarm water and place near a sunny window.

Questions
Describe what happened with your tuber.

Do you think the potato could grow to its full potential in the jar of water? Why or why not?

Credit: This activity is adapted from the Virginia Department of Agriculture and Consumer Services,
http://www.vdacs.state.va.us/teachers/growing.html