

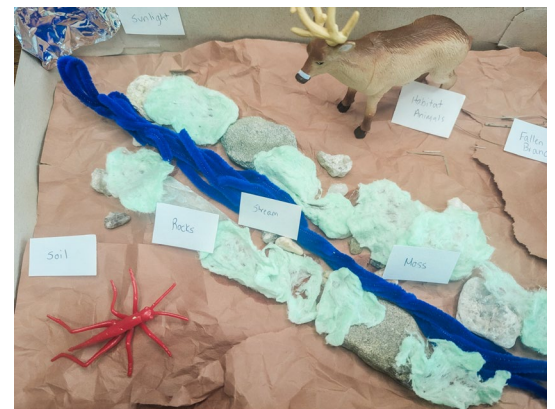
Teacher's Guide

Nonvascular and Vascular Plants - Habitat Survivor STEM Challenge

Students will:

- work in teams to build a 3D habitat that allows their assigned plant (vascular or nonvascular) to survive.
- “construct an explanation to compare how vascular and nonvascular plants obtain, transport, and use nutrients and water necessary for survival”.

1. You will assign a nonvascular or vascular plant to a group of students (or they can choose their plant).
2. They will build a model of a habitat designed to help the plant obtain, transport, and use water and nutrients for survival.
3. Students can present their model to the class, explaining why they designed the habitat the way they did.



**** Extension option:** After building their habitats, students can be given a “survival challenge” (included) that may require them to change their habitat designs or explain how they would modify them.

Gather STEM materials such as these to provide options for your students while building their habitats.

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|--------------------------------|-------------------|-----------------|
| • cotton balls | • sponges | • toothpicks |
| • rocks | • pom-poms | • bark chips |
| • modeling clay | • paint | • pinecones |
| • construction paper | • aluminum foil | • dirt |
| • pipe cleaners | • tape | • markers |
| • leaves | • water | • aluminum foil |
| • sticky flag labels | • pebbles | • plastic cups |
| • felt | • sticks or twigs | • index cards |
| • foam | • hot glue | • food coloring |
| • plastic wrap | • glue | • figurines |
| • shoe boxes - cardboard boxes | • yarn or string | • straws |

Included:

- teacher's guide
- plant assignment cards
- plant assignment cards editable template
- student direction sheet (editable)
- student planning sheet (editable)
- plant research slides (Google Slides)
- rubric (editable)
- extension activity directions
- extension activity scenario challenges (editable)
- extension activity student sheet (editable)

