



STANDARDS & CONNECTIONS: NGSS.3-5-ETS1, NGSS.MS-ETS1, NGSS.MS-PS3-3

BACKGROUND:

Greenhouses are used in agriculture because they stay warm inside, even during the cold months. They are typically made of glass or some type of translucent material. As the sun shines on the greenhouse, the temperature inside increases, but the heat is trapped so it can't escape.¹ As a result, greenhouses can prolong the growing season, making it possible to grow plants during the times of the year where the plant would otherwise freeze or die. Greenhouses are also used to grow young plants called seedlings because of the preferable environment.

SUGGESTED MATERIALS:

Plastic wrap, plastic water bottle, plastic pipe, wire, wood pallet, cardboard



CREATE

Students will create a miniature greenhouse.



TEST & IMPROVE

Students will test their prototype, seek areas of improvement and make changes where needed.



SHARE

Students will share what they've created and their lessons learned.



Put a temperature gauge inside the greenhouse and place it outside. See if the temperature inside stays warmer than outside. Visit your local nursery to see what they use to maintain their greenhouses.

¹ NASA. (2018, April 23). What is the greenhouse effect? Retrieved from: <https://climatekids.nasa.gov/greenhouse-effect/>

² University of Massachusetts Amherst. (2015). Starting a greenhouse business. Retrieved from: <https://ag.umass.edu/greenhouse-floriculture/fact-sheets/starting-seeds-in-greenhouses>

