

# Garden STEM at Home Cold Frames



WE GROW MINDS, TOO.

## COLD FRAMES



### **OBJECTIVE:**

KIDS WILL CREATE THEIR OWN COLD FRAME TO EXTEND VEGETABLE GARDENING INTO WINTER.

#### BACKGROUND

Dallas winter weather allows for production of many vegetables well past fall and again before spring - if not through the entire winter. Some of the easiest and hardiest vegetables to grow include leafy greens (swiss chard, spinach, kale), root vegetables (carrots, radishes, garlic) and other winter favorites (broccoli, brussels sprouts, artichokes).

A cold frame is a simple, unheated greenhouse that harnesses the power of the sun to add extra warmth to your growing plants. Designs can range from elaborate to entirely recycled and most allow you to adjust for warm winter days when a closed greenhouse may provide too much warmth.

The resources shared below provide a myriad of design options for any budget. We invite you to explore these resources, along with the supplies that may be lying around your school, garage, neighborhood or closet to see what you can design.

#### INSTRUCTIONS

- 1. Explore the resources below and find design that appeal to you.
- 2. Create a model of your design using objects found in your school or home. The recycling container should have everything you need!
- 3. Brainstorm where supplies are available and choose a design that could make use of these elements.
- 4. Use the planting guide to determine when to plant your desired plants.
- 5. Optional: Create a new design that will capture sunlight, insulate plants and allow you to ventilate on warm days.

#### **ADDITIONAL RESOURCES**

Epic Gardening cold frame plans with price estimates: https://www.epicgardening.com/cold-frame-plans/

Backyard Boss cold frame designs:

https://www.backyardboss.net/greenhouse-coldframes/

Savvy Gardening DIY recycled window cold frame:

https://savvygardening.com/build-a-div-cold-frame-using-an-old-window/

North Central Texas Planting Guide

https://dallas-tx.tamu.edu/files/2010/06/Vegetable-Planting-Guide.pdf

Building and Using Cold Frames: Garden Way Publishing Bulletin A-39 by Charles Siegchrist; ISBN: 0882662139

Gardening Lab for Kids by Renata Fossen Brown; ISBN: 978-1-59253-904-8