Grow to Learn
What do plants need in order to germinate?

• Warmth
• Air
• Moisture
• Nutrients
What do plants need in order to grow?

• Light (artificial or sunlight)
• Air
• Moisture
• Nutrients
Types of Systems/ Planting Tips

- Container systems
  - Plastic jugs
  - Buckets
  - Clamshells
  - Raised beds
  - Traditional garden

- Planting Tips
  - Plants require space
  - Plants need proper drainage
  - Soil needs to be replenished with nutrients
Newspaper Pots

• **Brief Description:** Create flower pots while being mindful of the environment by using recycled material.

• **Materials:** Newspaper, scissors, glue

• **Background:** Turn your need for growing containers into a springboard for challenging students’ imaginations and reinforcing waste reduction and recycling. These newspaper pots can be planted directly into gardens or large containers and are easy to make. In addition, recycled newspaper pots make great experiments and research opportunities. Discuss with students what plants need in order to germinate (warmth, nutrients, air and water) as well as what plants need in order to grow (light, nutrients, air and water).
Self Watering Plant System

• Tools/Materials: plastic water bottles (with caps), string, soil, seeds, water, scissors

• Standards: What plants need to grow, capillary action, environmental sustainability

• Research opportunities!

• Directions: Remove wrapper, cut bottle in half, punch small hole in the cap, string the string through the hole, flip over into the bottom of the cup, wet string, fill with soil, plant seeds, watch them grow!
Topsy Turvy
Hydroponic Bucket Garden

• Supplies
  • 5-Gallon Bucket
  • Polystyrene Foam
  • Water
  • Water-Soluble Fertilizer
  • Epson Salts
  • Suitable Plants
  • Net Pots
  • Jigsaw/Drywall Saw/Sharp Knife
Raised Bed Gardens

- Keeps plants contained
- Control over soil/adding nutrients

Tips:
- Make sure students can reach all areas of the raised bed
- PLEASE do not allow students to stand in the raised beds
- Cover with cardboard/ tarp in the summer to avoid weed growth
Thank you!