





Planting Potential

Scientists who study plants, called *botanists*, discovered over 350,000 types of plants so far on Earth. Most plants make their own food with air and sunlight.

Bonnet Springs Park will become home to millions of plants to see, smell, touch, and even taste! No two plants grow the same way—and you can see those differences like a *botanist*. Build your own Mini-Park and explore the different changes plants make as they grow!

You Will Need:

- Foam core board - Or a clear, colorless 2-Liter Bottle.
- Plastic food container (Look for this symbol: )
- Clear Shipping Tape
- Top soil or Dark colored dirt
- Four different kinds of seeds
- Permanent Marker
- Ruler (inches and Centimeters.)

Make a Mini-Park

Let's help your seeds grow!



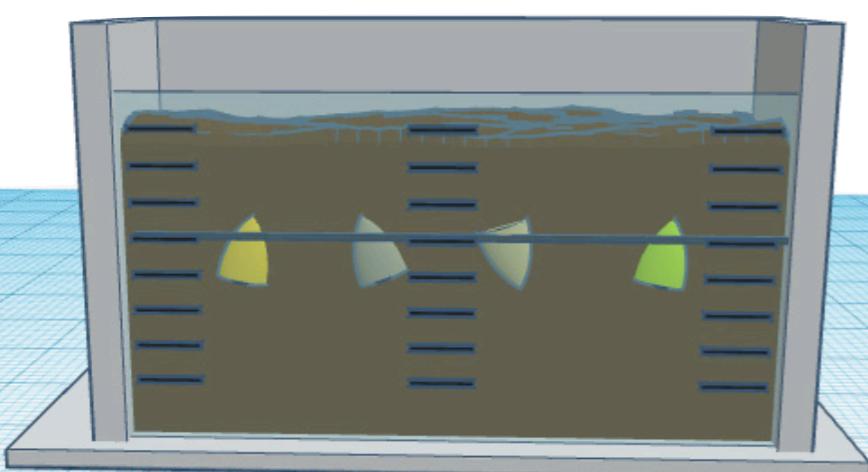
Match each seed to its name.
Write seed names in pencil on the
chart to the right.



Build your Mini-Park using the directions below. Get help from a grown-up for cutting pieces.



Every day, inspect your seeds to see which grows fastest. Use the ruler on your Mini Park to measure the size of your growing plants!



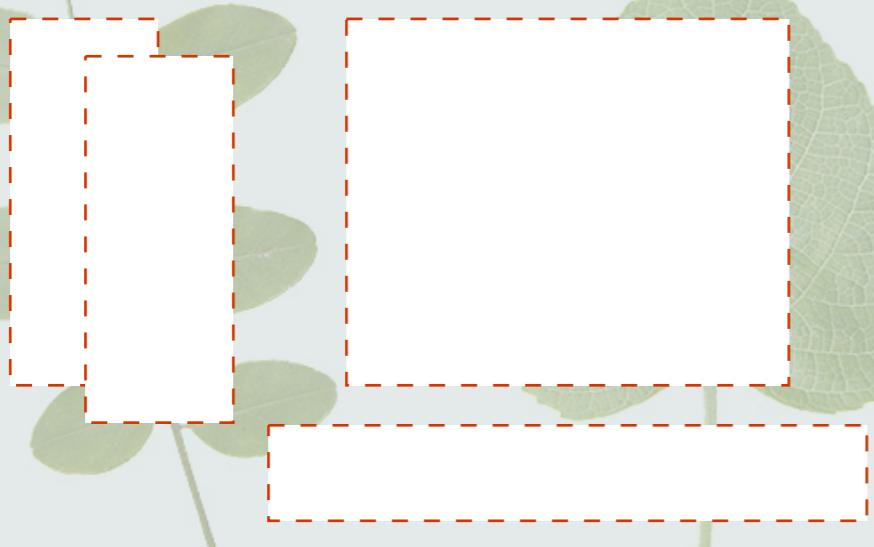
- Which plant grew the fastest?
- How tall was your tallest plant?
- Was your slowest growing plant a flower or a food plant?
- What different needs might food plants have from flowering plants?

Building your Mini-Park

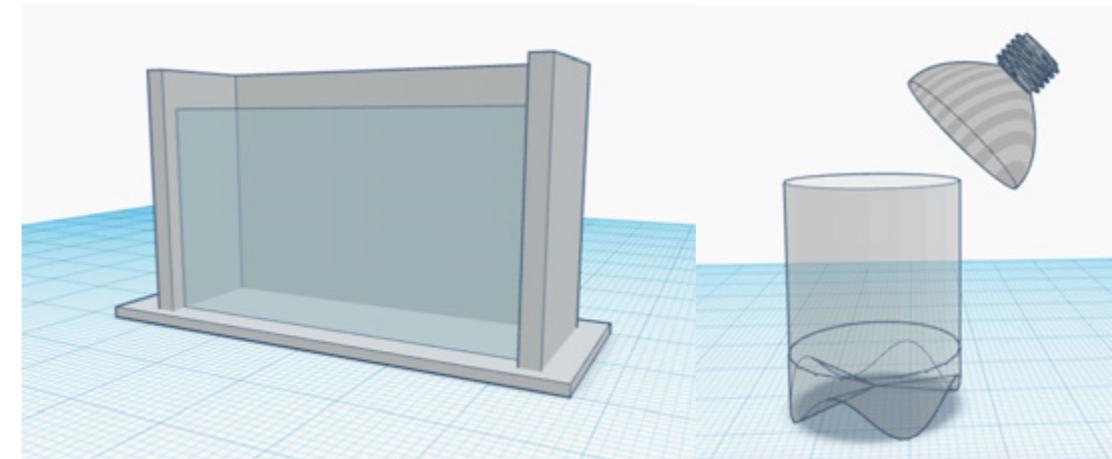
We will build a tall, narrow box with an open top and a window on one side. The plastic container provides a view as the plants grow. Using overlapping layers of clear shipping tape will make sure that our container is water-resistant.

For an alternative setup for this activity, cut off the top of a clear, colorless 2-Liter bottle, and jump to Step 4 where you see this symbol: 

1. **Make a Window:** Cut a rectangle from the plastic food container. This will create our front window.
2. **Build our Box:** Cut a piece of foam board 1 inch wider and 1 inch taller than the plastic window. Cut two pieces of foam core that are 2 inches wide, and 1 inch taller than the plastic window. Cut one more piece of foam core for the base that is 4 inches tall, and at least 2 inches wider than the plastic window.



3. Assemble the pieces with clear shipping tape. Overlap the foam pieces 1/2" and seal with tape to create an inner waterproof barrier. A second layer of tape will help to ensure the water is retained.



4.  Use a ruler and permanent marker to mark lines half-way from the bottom of the Mini-Park. Mark 1 cm distances counting away from this line to the top and bottom.
5. Add topsoil to 2 cm from the top of your Mini-Park .
6. Use a pencil to push your seed down to the half-way line against the window. Make a label for your seed with a piece of paper and tape and stick it to your window. Be careful—the seed should be visible from the outside of your Mini-Park. Repeat this for each seed you'll grow.
7. Place your Mini-Park near a sunny window, and add 5 drops of water directly above each seed, every day. Every plant **germinates** differently—you may see your first sprouts as early as 4 or up to 10 days.

Each day after sprouting, measure the growing **radicle** (baby roots) and the **hypocotyl** (baby stem) as your plant develops. Try to check your mini-park at the same time each day.