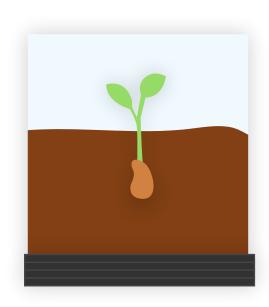
# **CD** Greenhouse

#### Collect:

- Clear CD jewel case
- Potting soil
- Small bowl
- Seeds (grass seeds, lima beans, or pinto beans work well)
- Eyedropper
- Water
- Clear tape
- Permanent Marker



### Create your greenhouse.

- 1. Open the CD case and remove the plastic tray that normally holds the CD.
- 2. Place a large handful of potting soil into a small bowl. Mix the soil with water until it is wet, but not muddy.
- 3. Fill the empty case halfway with the wet potting soil, leaving the half closest to the case's hinge empty. This empty space will be room for your plant to grow!

#### Plant your seeds.

- 4. If you are using tiny seeds like grass or radish seeds, sprinkle them near the top edge of the potting soil. If you are using a bean, place it in the middle of the soil with the concave side facing away from the hinge of the CD case so that it looks like a frown instead of a smile.
- 5. Water the seeds or bean using an eyedropper.
- 6. Close the case and stand it upright so that the hinge is at the top.
- 7. Tape up any gaps in the sides and bottom of the CD case, but leave the gap in the hinge open.

## Observe your plant's growth!

- 8. Place the CD case in a sunny window. Use an eyedropper to add more water each day through the gap in the hinge of the case.
- 9. Observe your seed every day. Once they start growing, mark each day's root and plant growth on the CD case using a permanent marker. Depending on the seed, it will take up to 10 days to germinate. Optional: Use different a color permanent marker to draw in each day's growth on the CD case.

### How do plants grow?

All plants need water, carbon dioxide, sunlight, and nutrients in order to grow from a seed into a plant. With your modifications, the CD case became the perfect habitat for the seeds to germinate and grow.











If you watched your plant each day, you may have noticed different parts of the plant growing. The plant first germinated by splitting its seed case and growing out of the top. Roots grew down through the dirt to help anchor the plant in place and absorb nutrients and water from the soil. The stem of the plant carried these nutrients and water up into the leaves, helping the plant grow. Plants have to make their own food through photosynthesis. This process requires the green pigmented chlorophyll in the leaves to convert the carbon dioxide in the air and energy from the sun into sugar and oxygen. The plant uses the sugars as food, and we use the oxygen to breathe!









