## Potato Maze: Make a Plant Obstacle Course!

Have you ever wondered how a weed, poking through a sidewalk crack, or a bit of driveway can seemingly pop-up through concrete? This experiment works on the same simple principle: plants need light to grow, and they'll go to great lengths to find it!

A very visual way to explore science, the experiment allows kids to turn an old shoebox into a plant obstacle course, then watch a potato plant wind its way through the maze in search of sun. Not only will this keep your child entertained, it will teach her an important lesson about living things in the process.

## What You Need:

- Shoebox with a lid
- Several pieces of cardboard
- Matchbox cars, spools of thread, small cardboard jewelry boxes, or other obstacles
- Sprouting potato
- Scissors
- Tape
- Damp soil
- Flowerpot small enough to fit in the shoebox when you close the lid

## What You Do:

- 1. Cut a small round hole, about the size of a quarter, at one end (one of the short sides) of a shoebox.
- 2. Cut up several pieces of cardboard, and tape them to the inside of the box, so they stick out like partitions, creating a winding path through the inside of the box. Your child can cut them so they go completely across from one side to another, like a row of walls (in which case she should cut a quarter sized hole in each one), or she can cut them to go partially across, then tape some other obstacles along the box floor as well.
- 3. Put the sprouted potato into the flowerpot, and cover it with moist soil. Make sure that most of the sprouts are facing up. (Note: If you don't have an already sprouted potato, you can leave one in a dark place at room temperature and wait for it to sprout. It can take as long as six weeks. Or, you can use a small vine plant, like a bean or ivy, instead of the sprouted potato.)
- 4. Place the flowerpot on the opposite end of the shoebox, away from the hole. Cover the shoebox with the lid and put it in a sunny place, with the hole facing the light.
- 5. Ask your child what she knows about plants and what they need to grow. Do they need water? Sun? Food? If you like, you can talk a bit about the fact that plants need light and oxygen to produce food. You can teach her the fancy term for the process of converting sunlight to the fuel they need to grow: photosynthesis. What does she think the potato plant will do in its attempt to find sunlight? Ask her to make a prediction.
- 6. Every 2-3 days, lift the lid and take a peek as you water the plant.

Depending on the time of year, the potato, and the obstacle course created, this experiment can take a few days, or more than a week. Either way, it's a great way to watch something you'd never expect: a plant complete an obstacle course! A-*maze*-ing!

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