

Make a plant light maze

Have you ever noticed that most plants grow towards the sunlight? Even when it's not easy for them to do it, they'll find a way. There is a special science term for this response. It's **phototropism**.

Make your own plant light maze to see phototropism in action!



Step 1

Plant your seed, or sprout, in your flower pot. Make sure the soil is moist but don't flood it (over water).



Step 2

Draw and then cut out a small round hole at one end of the shoe box.

Have an adult supervising/helping with this part.

You'll need:

- A shoebox with a lid
- Soil in a small flower pot
- Seeds – fast-growing ones like beans work well
- Tape
- Ruler
- Black card
- Craft knife
- Scissors
- Pencil

Step 5

Tape up any other cracks on the outside of your shoebox so the light can't get in there either.



Step 6

Put your flower pot in the bottom of the shoebox, on the opposite side as the hole in the divider.

Close the shoebox lid.

Tape it up if there are any cracks where light could get through.

Set your shoe box in a sunny area, like a windowsill.



Step 3 & 4

Tape up any cracks on the inside of your shoebox so light can't get in.

Make a divider out of black card measured to fit exactly inside your box (or a few dividers if you want to really challenge your plant).

Cut a round hole in the divider on the opposite side of the hole in the top of the box.

Fix the divider/s into your box and tape it well, so there are no cracks for light at the sides.

Make sure to open up your box to check on your plant's movement through the maze (and to give it some water) every few days.

Watch over time as your plant turns and bends to make it around the obstacles/s, towards the opening in the box and the light.

FUN FACT:

It's a plant hormone called **auxin** that tells plant cells where to grow longer.

