

# Get Growing – Propagation Activities

Propagating is making new plants from mature existing plants. So, it is a process of increasing your number of plants.

Propagation can be done in 3 ways:

1. Planting seeds.
2. Dividing, from the roots up, an existing plant into two or more plants.
3. Cutting a piece from a parent plant.

Planting seeds is the method of propagation with which we are all most familiar. If you completed the sprouting activity from March 24 in our “At-Home Activities,” and moved your kidney bean sprouting into soil, then you’ve already propagated by planting seeds!

To propagate by division, you would need to split a parent plant into two at the root level. This could be done at home with a potted plant, like aloe. You would use a sharp knife, and cut down into the soil, cutting the root mass into two pieces. You would then compact the soil of the parent plant, to ensure there are no hollows near the roots, and repot your new shoot. Without currently having an indoor potted plant, propagation by division is more difficult.

Propagation by cutting, on the other hand, is a great way to bring home part of your favourite plant. You may propagate plants using cuttings from the stems or from the roots. The willow is a common plant in NL that will propagate by cutting quite easily. Next time you are on a walk, and you come by a willow plant, you can use sharp pruners to snip off a branch no thicker than your index finger. You should cut the branch where it divides from the main stem, so that it doesn’t cause a lot of disturbance to the plant, and where there is a bud close to the tip of your cut. Roots will start growing at a leaf node – the bump on the branch where leaves branch off, so cut with a node close to what will be the bottom of your plant. You can also take cuttings of house plants in this way.

Now let’s think about propagating from the foods we eat! Fruits have seeds in them, so to propagate from fruit, you would cut the fruit open, and plant the seeds inside. But vegetables are different parts of plants – they don’t have seeds inside them, so we would have to propagate a different way. In this activity, we will take you through propagation by cutting for carrots and ginger.



## *Roots*

Many root vegetables, like carrots, turnips, and parsnips, will root easily and send up fresh leaves. This project works well with all root vegetables; our suggestions is to use carrots.

### Materials:

- ☼ A carrot
- ☼ A sharp knife
- ☼ A shallow dish with some small pebbles or marbles



### Method:

1. Cut about 5 cm (2 inches) from the leaf end of the carrot.
2. Fill the bottom of the dish with pebbles and add enough water to cover the pebbles. Place the carrot top on the pebbles. Place you dish with carrot top in a sunny spot, and keep the dish topped up with water.

### What you will see:

Green leaves should appear on top of the carrot top within a week of setting it in a shallow dish of water.

Eventually, little roots will appear from the bottom of the carrot top, and you can plant it in some potting soil.



### Extend the Learning:

Continue to let the carrot grow in soil. Carrots are biennials, meaning they live for two years. Like most biennials they will flower and set seed in their second year only. We eat first year carrots, so by planting one, you must to wait one season for it to set seed.

You can also try this activity with turnips or parsnips. Propagation by cutting is very common in NL for potatoes. New potatoes can also grow from pieces of potato with an “eye,” which is a node or place where new growth begins.

## Stem

Powdered ginger is used to flavour ginger ale and make gingerbread, but did you know that it comes from a rhizome, a type of underground stem? You can find fresh ginger in most grocery stores and sprout it yourself so that you can always have fresh ginger on hand.

### Materials:

- ✿ Fresh ginger - choose the plumpest, healthiest- looking piece possible
- ✿ Glass jar or drinking glass
- ✿ 3 toothpicks
- ✿ Sharp knife

### Method:

1. Cut a piece of ginger about 8 cm (4 inches) long.
2. Poke the toothpicks into the piece of ginger like the spokes of a wheel.
3. Put the ginger in the glass so that the toothpicks rest on the rim and support it, and fill the glass with water.
4. Place in a well-lit spot out of direct sun, and keep the water level topped up.



### What you will see:

Green shoots will soon sprout, and small roots will grow downwards.

If you wish, you can then transplant the ginger to a large pot filled with rich potting soil. After several months, the original rhizome will grow new fat parts. You can dig this up and slice off some of the new section, and use it in cooking.

