

HOME GARDEN LESSON 2

Transplanting Your Seedlings



SCIENCE: Observing, Monitoring, Questioning

MATHEMATICS: Collecting Data, Modelling, Measuring

LANGUAGE ARTS: Writing, Reading, Comprehending

VISUAL ARTS: Drawing, Colouring, Designing, Creating

2.1 INTRODUCTION

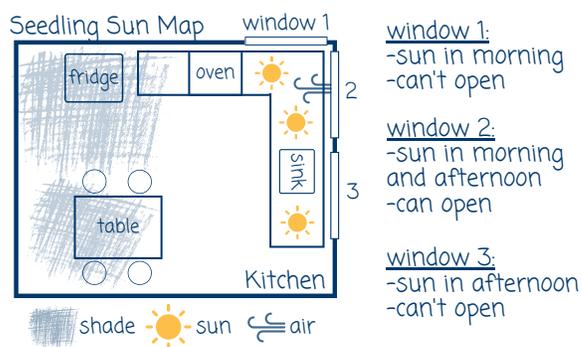
This lesson will guide you through the process of transplanting seedlings into larger pots. How do you know when they're ready? When a seedling begins to grow, it will have tiny "seed leaves," which will wither and fall off to make room for the "true leaves." While seed leaves look more or less the same between plants, true leaves are the leaves the plant will have for the rest of its life. When your seedling has three or four true leaves, it's time to transplant!

Think of a hermit crab. If a hermit crab grows too big for its shell, it has to move into a larger shell so it can keep growing. Plants are the same, but they aren't able to find a new pot for themselves - we have to do it for them. When a pot is too small for the seedling's roots, the seedling needs to be transplanted to a larger one. The appearance of true leaves can tell us that the roots will soon need more space to grow.

This activity should be completed when your seedlings from [Home Garden Lesson 1](#) are ready to transplant.

2.2 CREATE A SUN MAP

1. In your **Garden Journal**, write "**Seedling Sun Map**" at the top of the next blank page. The following activity will be completed on this page.
2. Think about the space where you want to grow your seedlings. For now, these plants are too small and delicate to go outside. Plants need a lot of sun to grow, so in order to pick a good spot for them to live indoors, you will create a Sun Map.
3. Observe this space for an entire day. Which spots get sun in the morning? Afternoon? Which spots never get sun? Which spots feel warm, and which feel cold?
4. Draw a map of this space. Based on your observations, fill in the sunny and shady spots on your map with colours, pictures or shading. Add as many details as you think would be helpful to find the perfect spot. Your completed map might look like the following example:



5. Using your Sun Map, decide where you want your seedlings to grow. In this example, the counter-top in front of "window 2" appears to be the best spot. This window gets sun all day, and can be opened to allow air to flow through. You should choose somewhere that your seedlings will be warm. Most plants need at least six hours of direct sunlight, so consider that as well when choosing the perfect spot.

2.2 MATERIALS:

- Garden journal
- Pencil or pen

Optional Materials:

- Coloured pencils or markers for drawing/colouring

TIPS AND TOOLS

Plants need sunlight, water, nutrients, room to grow, and air. They need to breathe for the same reasons we do!

Wherever you grow your seedlings, they should ideally get a little bit of airflow from an open door or window to help them breathe.



2.3 TRANSPLANT YOUR SEEDLINGS

1. Prepare each plant pot (or recycled container) by filling about three quarters of the way with soil or dirt/compost mix.
2. Cut or tear each individual cup, with the seedling inside, away from the egg carton. If there is more than one seedling in a single cup, each seedling will need to be planted in its own pot.
3. Gently scoop or push the soil and seedling into your hand. Be careful with the roots!
4. Place both plant and soil into your prepared pot and add more soil or dirt/compost mix to fill the remaining space around your seedling. Gently pat it down to get rid of any air trapped underneath.
5. Repeat as necessary for each seedling.
6. Put your pots in the place you chose for them in the previous activity. Keep the pots in a waterproof tray, just like your egg carton, to catch any excess water.
7. Water generously, because transplanting can be stressful for seedlings. You should water them frequently to keep the soil moist, but not soaking wet.

Optional Step: Try making signs for your plants with popsicle sticks so you can tell them apart. Decorate your plant pots with whatever craft supplies you have on hand!

2.3 MATERIALS:

- Plant pots*
- Potting soil or dirt/compost mix
- Waterproof tray
- Seedlings

OPTIONAL MATERIALS:

- Craft supplies for decorating plant pots
- Popsicle sticks to make signs



2.4 NEXT STEPS: MOVING YOUR PLANTS OUTSIDE

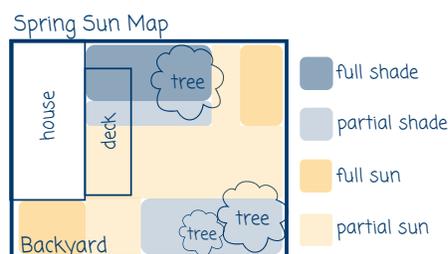
1. Plants can be transitioned outside after the "last frost date", which is usually at the end of May or beginning of June. By this time, temperatures should be warm enough for your young plants.
2. Before your plants can go outside, they will need to go through a process called "hardening off." This will make them strong enough to survive in changing weather. This should be started about ten days before you plan to move them outside permanently. There are three factors to hardening off:

 **Sunlight:** Start putting your plants outside on mild days. Place them in a spot with partial shade, because they can get a sunburn (just like you). Bring them back inside in the evenings when it gets cold.

 **Temperature:** Check the temperature at night. When the nights are consistently warm enough (over 10°C), they can begin to stay outside overnight.

 **Water:** While your plants are being hardened off, water them less frequently than you normally would. By forcing them to search for water with their roots, they are able to grow and develop their root system.

3. Once you have finished the process of hardening off, your plants should begin to thrive outdoors. It's time to choose a spot where they can live comfortably in their pots.
4. Write "**Spring Sun Map**" at the top of the next page in your garden journal. As the seasons change, you should also make a "**Summer Sun Map**" and "**Fall Sun Map**."
5. Repeat steps 3-5 of Activity 2.2 to draw another Sun Map of your outdoor space. This will help you decide where the plants will live. Your map might look something like this:



Moving your plants outdoors exposes them to more than just the weather. Stay tuned for the next few Home Garden Lessons where we will cover outdoor care, pollinators vs. pests, and more!

2.4 MATERIALS:

- Garden journal
- Pencil or pen
- Young plants

Allow your seedlings to grow until they're about 7-10 cm tall before completing this activity.

Optional Materials:

- Outdoor thermometer (you can also check temperatures via your local weather information)
- Coloured pencils or markers for drawing/colouring

**If using recycled containers, poke a few small drainage holes in the bottom for excess water.*

TIPS AND TOOLS

When hardening off your plants, start by putting them outside for only a few hours at a time. Gradually increase the time outside every day.

This allows them the time they need to adjust to varying temperatures.

