

Working in partnership with



WE DISCOVER, WE GROW

Girlguiding



Morrison's Brownie Gardener Badge Resource

Girlguiding is joining in with Morrison's Let's Grow campaign. Encourage your Brownies to learn about gardening and complete the Brownie Gardener badge.

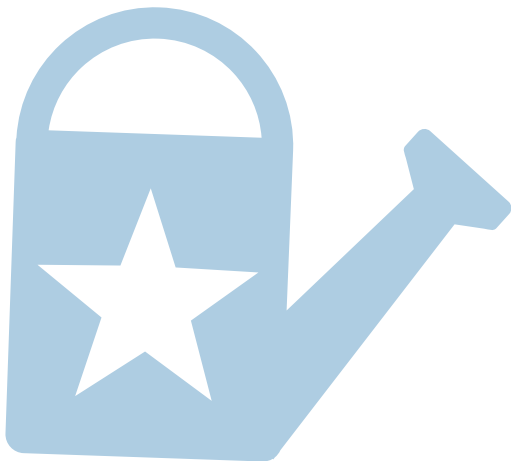
Grow a unit salad - Clause 2

Give each Six a different ingredient of a salad to grow, which could then be prepared and eaten by the unit.



THIS WILL TAKE
15 to 20 minutes
to plant each set
of seeds.

The different types of seeds will take different lengths of time to grow. Radishes, spring onions and beetroots will take about eight weeks to grow enough to eat. Lettuces, chives, dill and cucumbers will take about 12 weeks to be big enough to eat, but bear in mind that cucumber needs additional heat to grow well so will need to be grown indoors. Tomatoes and carrots will take about 16 weeks. If you want the vegetables to be ready at the same time but can plant them only in one go, harvest them when the plant that takes the longest time to grow is ready. The other plants will just be more fully grown but shouldn't spoil.



Rather than buying plant labels, encourage Brownies to make their own using lolly sticks or cut-up yoghurt pots.



YOU WILL NEED

- * Plastic sheeting or newspaper
- * Seeds
- * Pots/planters/seed trays and appropriate plant saucers
- * Compost or soil
- * A ruler
- * Labels - ice lolly sticks or cut-up yoghurt pots
- * Pencil or permanent marker pen
- * Watering can with a rose
- * Windowsill or another sheltered area for the plants to grow



WHAT TO DO

1. Lay out the plastic sheeting for the Brownies to work on, or use newspaper.
2. Give each Six a couple of packets of seeds and ask them to read the instructions on the back of the packets so that they know what conditions are best for the plants.
3. Get the Brownies to fill the planters, pots, or seed trays with soil, making sure that they break up any large clumps. This can be done by lifting each container and gently tapping it on the work surface to settle the soil, then topping it up if needed until it is full.
4. Ask the Brownies to follow the instructions on the seed packets to gauge the depth and distance apart to plant the seeds. They can use the ruler to work out where to plant the seeds and dip their fingers into the soil to make a suitable hole.

Contd

5. Get the Brownies to place one seed in each hole and cover it with soil, gently patting the soil down so that it is slightly compacted.
6. The Brownies can write the name of the plant on the plant label and push it into the soil so that it is visible.
7. Place the plant pot on a suitable saucer. The Brownies can gently water the seeds using a watering can with a rose to avoid disturbing the soil too much.
8. Place the containers and trays on a windowsill or other sheltered spot. Salad plants can be grown inside throughout the year in pots and seed trays; however, you will need to make sure that they get enough light and heat. They can also be sown outside in pots or directly into the ground from February to August, and are generally harvested from June to October.
9. Make sure the plants are regularly watered. Weeds might need to be removed as the plants grow bigger, and smaller seedlings can be picked out to make room for the larger plants.



Choose interesting seed varieties to give the salad more colour (Purple Haze carrots, Bright Lights radishes, mixed salad leaves).



Growing experiment - Clause 4

Plants need specific conditions to grow and thrive. Challenge the Brownies to test how different conditions affect plants with this experiment.



THIS WILL TAKE

20 minutes to set up the experiment and then 15 minutes one week later to look at the results.



WHAT TO DO

1. Give each Six four yoghurt pots.
2. Give each Six some cotton wool, and ask them to divide it into four and put a piece in the bottom of each of their yoghurt pots.
3. The Brownies should label two pots with a W (for wet) and then soak the cotton wool in those pots in water so that they are damp but not too wet. They can pour out any excess to make sure they are not too wet.
4. Give the Brownies some seeds. They will need to distribute the seeds between their four pots.
5. One of the wet pots and one of the dry pots will be kept in the dark. Get the Brownies to identify these pots by writing a D on them. Each Six should now have one plain pot, one wet pot (W), one dark wet pot (DW) and one dark dry pot (D).
6. Give each Six four plastic bags and ties and ask them to put one yoghurt pot into each plastic bag and use the ties to seal them.
7. The Brownies should take the pots home. They will need to put the two pots labelled D in a dark place like a cupboard, and the other two pots in a light spot. Condensation in the bag should keep the seeds damp, but they might need to add some water to maintain the level of moisture in the wet pots over the week.
8. Ask the Brownies to bring the pots back after a week and see what the difference in the growth has been. Alternatively you could ask them to record and bring in their findings. It might be a good idea to make a set of pots to keep at your unit's meeting place too.



YOU WILL NEED

- * Four empty yoghurt pots per Six
- * Cotton wool
- * Permanent marker or chinagraph pencil
- * A jug of water
- * Mustard or cress seeds
- * Plastic bags and ties



Contd

Get the Brownies to record their findings in a chart.

	Wet	Dry
Dark		
Light		

They can draw a picture of what the different seeds look like.

9. Talk with the Brownies about other factors that they could have tested, such as heat and cold. Discuss how these findings affect the way that they would grow other plants.

Alternatively, test how plants grow in different soil conditions. Use soil straight from the garden, a half-soil half-sand mix, clay soil, fertiliser-enriched compost, etc. Use a seed like a bean or sunflower to see what the optimum conditions are. You could test other elements by replicating the light/dark wet/dry experiments. Use the same seed type for each variable so that it is a fair test.



Sunflower competitions - Clause 2

Test your Brownies' growing skills with a fun and competitive activity.



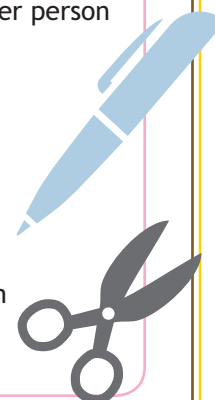
THIS WILL TAKE

20 minutes to plant the sunflowers. Sunflowers need to be planted between March and May and will flower between June and September.



YOU WILL NEED

- * Plastic sheeting or newspaper
- * A plant pot and plant saucer per person
- * Sunflower seeds
- * A plant label per person
- * Pen
- * Soil
- * Water
- * Canes and string to stake them
- * Scissors



Contd



WHAT TO DO

1. Lay out the plastic sheeting or newspaper for the Brownies to work on.
2. Give each Brownie a plant pot, a sunflower seed and a label (ask her to write her name on the end of it).
3. Ask each Brownie to fill the pot with soil, making sure that she breaks up any large clumps.
4. Each girl should place the sunflower seed on the top of the soil and push it down about a finger's depth. They should then cover it over and level the soil, then insert their name label into the soil at the side of the pot so that their name is visible.
5. Place the plant pot on the plant saucer and water it.
6. The sunflowers can then be taken home (or left at the unit meeting space if there is room) and cared for - watered and put into a sunny and sheltered spot.
7. When the sunflower plants grow to about a metre tall, they should be replanted into a bigger pot or into the ground.
8. The plants will need to be staked so that they don't break. Place a cane into the soil at the edge of the pot, or near the stem if replanted directly in the ground. Use the string to loosely tie the plant stalk to the cane.
9. At the end of the term, measure the plants or get the girls to measure them at home and bring their results in. You could have a prize for the tallest sunflower and one for the largest flower head.
10. Alternatively, you could use a smaller multi-head variety and see who had the most flowers.



This activity can be linked with the Wildlife explorer badge - sunflower heads can be made into bird feeders or can be harvested and made into bird puddings.
www.girlguiding.org.uk/Brownies > Badges



Weeds versus seeds game - Clause 1



THIS WILL TAKE
15 minutes



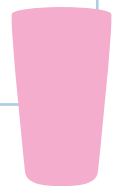
WHAT TO DO

1. Divide the group of Brownies into two groups: weeds and seeds. 'Plant' the 'seeds' into an area of the room which is designated as the seed bed. The Brownies should crouch down and act as seeds waiting to grow.
2. Split the seed bed in half. Ask the 'weeds' to fill the spaces in between the 'seeds' in only one half of the seed bed. The available space should make it noticeable that the weeds prevent the seeds from growing fully.
3. Tell the Brownies that the sun is shining and that the seeds and weeds are growing. The Brownies should stretch up and spread out as much as they can, with the weeds gently trying to push the seeds back. As they grow, it should become obvious to the seeds that the weeds stunt their growth by taking up space.
4. Pour the water from one jug in to half of the beakers and hand them out to the seeds and weeds on one side of the seed bed. Pour the water from the other jug into the rest of the beakers and give them to the seeds on the other side. It should be noticeable that the seeds in the bed without weeds get more water. You could do the same with fruit (to represent nutrition).
5. Discuss with the girls what the difference between the two seed beds was and why this made a difference to the growth of the plants. Talk about what this means for the plants that they grow and what action they need to take to help their plants grow well.



YOU WILL NEED

- * A beaker for each person
- * Space allocated as a seed bed
- * 2 jugs with equal amounts of water in them
- * Fruit (optional)



Spot the garden hazards - Clause 3



THIS WILL TAKE
15 to 20 minutes



WHAT TO DO

1. Set up a garden hazards scenario like a crime scene. Spread the hazards around the area and then put the tape up to mark off the area.
2. Tell the Brownies that they are not allowed to enter the garden (it is too dangerous) but that they need to direct the Leaders to make it safe. They can either identify the hazards in Sixes or all together depending upon the size of the group. They could either verbally instruct the Leader to make the changes or they could draw the different hazards and then share them as a group.
3. Once all the hazards have been identified, ask the Brownies about the correct way to look after the tools and chemicals so that they are kept safely.



YOU WILL NEED

- * Gardening tools (spades, trowels, rakes etc) left lying around on the floor
- * Hose or electrical equipment wires
- * An unprotected pond (a large sheet of blue paper)
- * Pot plants (add a toxic sign to represent poisonous plants)
- * Chemicals left without their lids on (this is dangerous so make a mock up using a recycled drinks bottle and simple 'dangerous chemical' label).
- * Some tape to mark off the area
- * Pens, paper and colouring pencils



Garden hazards should be dealt with in the following ways.

- * Tools should be cleaned before being stored. They need to be stored in a locked shed in such a way that they do not represent a tripping hazard and are not easily accessible to young children.
- * Hoses should be detached from the tap and the water drained from them before being coiled up and kept in a dry space. Keep the attachments on the hose so that they do not get lost and so that insects do not get inside.
- * Electrical equipment should not be used when it is raining. It must be stored in a locked waterproof shed.
- * Ponds are dangerous. To make them safer to small children and pets, make sure that it has gently sloping edges, is covered with a heavy-duty wooden trellis wrapped in wire mesh, and that there's a fence around it. Do not leave young children unsupervised near a pond or large body of water.
- * Poisonous plants should not be grown in a garden where there are children or pets. If this is not possible, other plants should be planted in front of them to prevent access from children and pets, and children should be educated about not touching them. Always make sure to wash your hands after being in the garden.



- * Chemicals should be kept in sealed containers in a locked, cool, frost-free place, out of the reach of children and pets. They should not be put in sunny positions. Powders should be stored above liquids as liquids could leak and cause reactions.
- * Safety equipment including goggles, hard hats, gloves and steel-toecap boots should be worn when using machinery.

Working in partnership with



WE DISCOVER, WE GROW

Girlguiding

Registered charity number 306016