
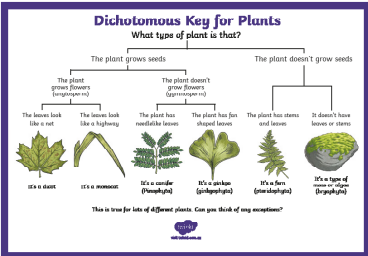
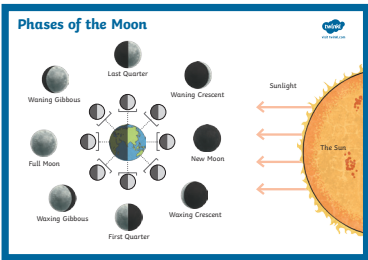


Going Further with Adult Guidance

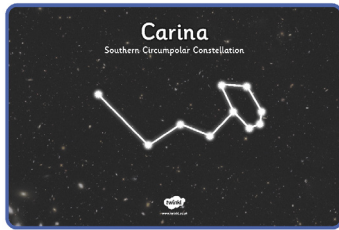
5-6 Backyard Sciences Australian Curriculum School Closure Home Learning Pack

Resources in the pack

Questions to Ask and Additional Activities

<h4>Weather Station</h4> <p>Weather Station Garden Craft Weather Vane</p> <p>To measure wind direction.</p> <p>You will need: drinking straw scissors card large coffee cup with lid pencil with a rubber on top drawing pin sticky tape small pebbles compass (optional)</p>  <p>Instructions:</p> <ol style="list-style-type: none">To make the arrow at the top of the weather vane, cut off the bendy section of the straw. Cut a slit in each end of the remaining length of straw.Cut a square and a triangle out of the card. Make sure the triangle is smaller than the square.Stick the square and triangle into the slits on the straw to make an arrow.For the base of the weather vane, fill the cup with pebbles. Use sticky tape to secure the lid on the cup and turn the cup upside-down.Stick the pencil through the base of the cup.Stick the drawing pin into the middle of the straw and then into the rubber on top of the pencil.Place the weather vane in the garden. You may like to use a compass to mark north, south, east and west onto the base of the cup. <p>twinkl Page 1 of 3 twinkl</p>	<ul style="list-style-type: none">• Use a thermometer to measure the temperature over time and add this data to your records.• How did you record the information from your weather station and changes in the weather, e.g. tables, graphs, drawings, photographs, spreadsheet?• Where did you place your rain gauge, thermometer, anemometer and weathervane? Why?• How does the rain gauge/thermometer/anemometer/weathervane work?• How did you measure the amount of rain in your area?• When did you find you had the most/least rainfall or highest/lowest temperature?• How did you measure the wind speed using your anemometer?• Why do people find it useful to know the amount of rainfall, wind direction, wind speed or temperature?
<h4>Dichotomous Key for Plants</h4>  <p>This is true for lots of different plants. Can you think of any exceptions?</p>	<ul style="list-style-type: none">• Use this display poster to help classify plants in your backyard.• Create your own dichotomous key to classify the minibeasts or other animals you have found in your backyard.• Record how many types of plants you have in your backyard using a table or graph.• Create your own dichotomous key for plants matching game by drawing or printing out plant pictures and placing them in the correct position on the dichotomous key.
<h4>Southern Hemisphere Phases of the Moon Display Poster</h4> 	<ul style="list-style-type: none">• Look out your window or go into your backyard and look at the moon each night. Record what it looks like.• Can you name all the phases of the moon? Use the Phases of the Moon PowerPoint to learn more.• Are the phases of the moon the same in the Northern Hemisphere?• Why does the moon appear to change shape?

Southern Hemisphere Constellations Display Posters



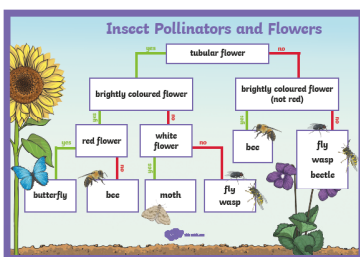
- Research where to find these constellations in the night sky using a star map.
- Look out your window or go into your backyard on a clear night and see if you can find some of these constellations. It is useful to have a pair of binoculars or a telescope, red LED glasses or glasses that are covered with a few layers of red cellophane (this will allow your eyes to remain dark adapted and still read a star map), compass app on your mobile device and warm clothes.
- Do these constellations remain in the same position over time? The Earth rotates and so the sky does change over time.
- Research some scientists such as Copernicus, Khayyāim and Galileo that studied stars.

School Garden Birds Display Poster



- **Record the birds** that come to visit your backyard.
- Which birds did/didn't you expect to visit your backyard?
- Research your favourite backyard bird.
- How can you make your backyard more bird friendly?
- Do birds help or harm your backyard?
- What do the birds in your garden eat and do?
- What other plants or animals in your backyard depend on birds, e.g. seed dispersal, aerating soil, eating pest insects?
- What time of day did you record the most/least birds visiting your backyard?
- What direction did the birds fly when they finished visiting your backyard?
- Did you see birds flying low or high in the sky over your backyard?

Identifying Insect Pollinators Display Poster



- Use this display poster to help you identify how flowers in your backyard are pollinated.
- Spend some time observing a flower in your backyard to see if a pollinator you predicted visits the flower.
- Why are pollinators important?
- What are some different pollinators besides those listed on this display poster, e.g. birds, bats, butterflies and beetles?
- Record how many types of pollinators you have in your backyard using a table or graph.
- What do think would happen if one of the pollinators on the poster no longer existed?

Solar Oven STEAM Activity

How to Make a Solar Oven

You will need:

Pizza box
Plastic wrap
Black construction paper
Newspapers
Scissors
Tape
Glue
Aluminum foil
Wooden skewers
Supplies to make a snack using solar oven



Instructions

1. Have an adult carefully draw a square onto the top lid of the pizza box.
2. Ask the adult to cut three of the sides of the square, to create a flap.
3. Line the inside of the pizza box with black construction paper.
4. Crumple up pieces of newspaper, and place the pieces around the perimeter of the pizza box to better insulate the oven. Be sure to not cover the center of the box, where the food will be placed.
5. Lift up the flap that was cut into the pizza box and bend it back so it is open. Cover the inside of the flap with aluminum foil, so the sun can reflect off the foil and into the pizza box.
6. Inside the flap, tape plastic wrap to cover the hole. This will allow sunlight to enter the oven.
7. Carefully use a skewer to prop open the aluminum-covered flap. It can be punctured through the flap and into the pizza box.
8. The solar oven is ready and can be used to prepare a delicious snack!



- Try this experiment on a cloudy day.
- Time how long it takes to cook different foods.
- Did the foil absorb or reflect sunlight?
- Why was black coloured construction paper used instead of white?
- Why is insulation an important feature of an oven?
- How do you think the oven cooked the food you placed in it?
- Where did the heat come from?
- What is radiant heat?
- Can you make any improvements to your solar oven?
- How is this solar oven like an electric/gas/wood oven found in your house?