

Biodiversity in your Backyard

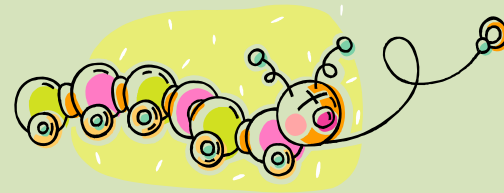


By Fran Leske



Classroom Resources to:

adapt **change** **expand**


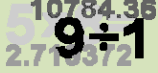








The format below uses Bloom's and Gardener's Taxonomies for lesson planning and the development of critical thinking skills.

"Teacher Notes for All Titles"

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Gardner's Multiple Intelligences / Blooms Taxonomy →	 Verbal/Linguistic	 Logical/Mathematical	 Visual/Spatial	 Bodily/Kinaesthetic	 Musical/Rhythmical	 Interpersonal	 Intrapersonal	 Naturalist
Remembering	Go into your yard, and using 3 columns, list each creature, what it was doing, and where it was found.	With a partner, collect pictures of all the insects you both saw in your yards. How many different ways can you group them? Make a pictograph or pie graph of your results.	Display the labelled insect pictures on the wall, as well as your matching graph.	How do snails protect themselves from predators, eg birds? Re enact a predator/ prey situation.	Clap a rhythm to words such as: bio diversity, habitat, recycling, pollution, vegetation, camouflage,	Discuss with a friend the value of snail or slug slime. Is it similar to anything a human has?	Collect the class data on your back yards, and collate a list of the native and non native plants you found.	Did you see any ants in your yard? What kind? Where? What time of day? What were they doing?
Understanding	Read the Worm Farm sheet with your class, discuss, and follow the instructions included.	Make a temperature chart for one week's weather, both day and night. How will you do this? Find out how to read a thermometer.	Record which creatures in your yard might be affected each day/ night by the changes in temperature. Why?	Choose three insects which have three distinct sounds/movements. Imitate, and ask your class to identify the insects.	Invent a rain or puddle song or rap dance. Perform for the class.	In a group, discuss whether water runs up or down hill, when, where and why water collects in puddles, and what happens when the rain stops.	With a partner, research the brush-tailed possum, and create a cartoon of 24 hours in a possum's life.	Make a dot-point list of what happens to dirt and soil during and after rain.
Applying	Complete the Word Find sheets on bird, insect and butterfly-attracting plants.	Collect all the class data from your backyard investigation, on types of birds seen there. What other data could you add?	What season of the year is it now? Begin a chart recording which of the birds from your class data are in your backyards now. Log any changes in future seasons.	Use paper to make the Origami Butterfly and caterpillar. How do these creatures move, and where is their natural habitat?	Find out how spiders communicate with each other. Record.	How have our "tidy yards" changed the biodiversity in our gardens and neighbourhoods? Discuss in groups and summarise as a class.	In a group, check if you have hair on your hands, can you curl your tongue, or have a widow's peak. Connect to Genetics.	Draw and label the main body parts of an insect, or a snail, or a spider. Display or explain the drawing.
Analysing	What evidence of animals can you find in your yard, even when you can't see them?	Do you think the speed of flowing water affects the size of rock and soil particles carried along by it?	Collect, draw or display any seeds, nuts or cones you found in your yard. What does this tell you?	What experiment could you set up to find out which insects prefer dry or damp ground or what plants a caterpillar prefers to eat?	Take photos of as many student back yards as you can, and classify into good or bad habitats.	Find out why bees or birds are so important for our life on Earth. Tell a partner your conclusions.	Discuss what soil does for us.	What do worms need to thrive? Find out how to make a worm farm.
Evaluating	Write about why you would not see a polar bear in your back yard.	How many layers of plant matter and foliage can you see in your garden? Record and describe them.	Research bird -feeder designs, and how the design must suit the habits and needs of particular birds.	If there are no hollow logs in your garden or local area, what aspects of biodiversity are affected?	How do sounds you hear in your yard tell you which creatures are there?	Did you find any fruits, berries, nuts, nests or ponds in your yard? Discuss the connection with biodiversity.	Develop a class debate around the topic:" Do all species have the right to exist?"	What is special about the Ligurian bees on Kangaroo Island in South Australia?
Creating	Make a small wetland in your backyard or school.	Create a good habitat in your yard, including up to 5 layers of plants and foliage. Sketch the layout and label.	Make a bird feeder for your yard, to suit a particular size bird.	If you were building a cubby house or fort in your yard, what site would you choose and why?	Create an insect attracting pot of plants, or a pot which repels unwanted insects,	Create a map of the biodiversity in your backyard. Include a Key.	Create a large mind -map which shows 5 main issues of biodiversity.	Make an ant farm, a weather vane, or a bat, bird or possum box.

Thinker's Keys

The Reverse

Make a list of creatures you would never see in your back yard, and say why.



The What If

What should you do if a brush-tailed possum fell down your chimney?



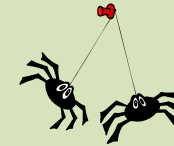
The Disadvantages

What are the disadvantages of cane toads in Australia?



The Combination

List the attributes of Spiders.



The Alphabet

Do an A-Z of all the insect words you know.



The BAR

Use the BAR format to design a frog pond. (Bigger, Add, Remove or Replace)



The Variations

Which things in nature make you feel happy?



The Picture

Paint, draw or create a collage of life in a rock pool.



The Prediction

What would be the consequences of no more birds or bees in our country?



The Different Uses

Make a list of other uses for car tyres.



The Ridiculous

What would happen if we all had to fly everywhere?



The Commonality

Which genetic traits do you have in common with your parents? What traits would you include in the perfect person?

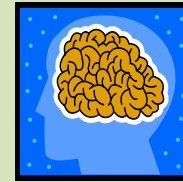
The Question

The answer is magpie. What are 5 questions that could have this answer?



The Brainstorming

List all of the flower names that you know.



The Inventions

Invent a new way to collect honey from a beehive.



The Interpretation

What would happen if we had a proboscis to eat with?



The Brick Wall

What can we do to prevent people using plastic bags?



The Construction

Do you know what creature makes the biggest nests in the world, and what the dimensions of the nests are?

The Forced Relationship

Which living creature would you least like to be forced to live with in your house for a week?

The Alternative

How can we have enough water without buying it?