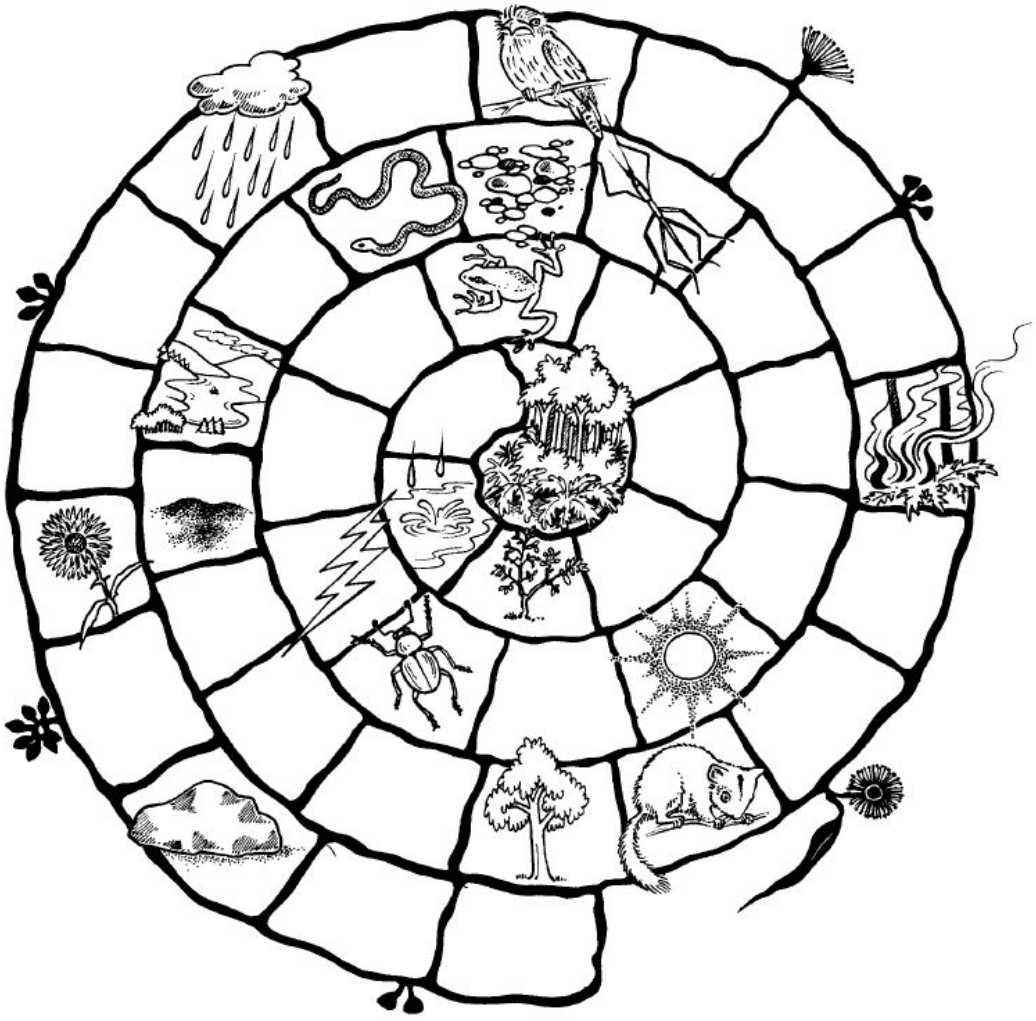
Is it living?

You will need: dice, coloured pencils, counters

To get to the forest you need to know what is living and non-living.

Start on the outside of the spiral. Take turns rolling a dice and moving that many spaces. The first player to reach the forest at the centre wins.

If you land on a living thing, go forward 3 spaces.
If you land on a non-living thing, go back 2 spaces.



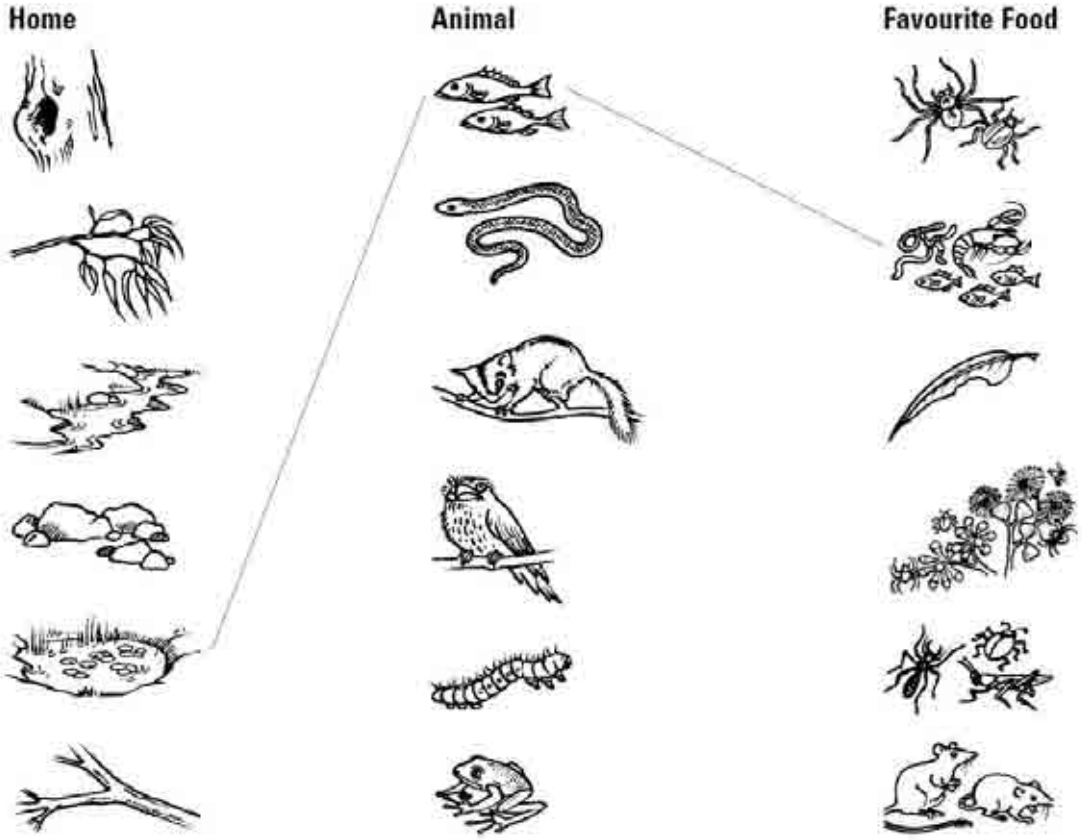
Did you make it to the forest?

Colour the plants green.
Colour the animals brown.
Colour non-living things red.
Put a big L next to the living things

In the forest

Animals in the forest need a place to live and food to eat.

Link the animals with their homes and favourite food.
An example has been done for you.



Use the following words to complete the sentences:

Leaves, hollows, streams, food

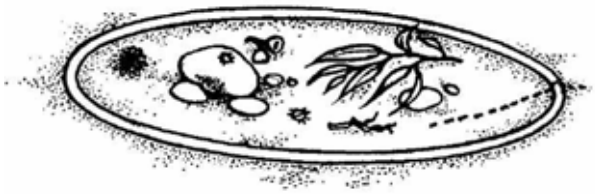
Some birds and mammals live in tree __ __ __ __ __ __ __

Plants can make their own __ __ __ __

Frogs and fish are found in ponds, creeks and __ __ __ __ __ __ __

Caterpillars live on and eat __ __ __ __ __ __

Under the trees: Exploring the School Ground



Choose an area under some trees in your schoolyard. Place a hula-hoop on the ground. Look carefully at the ground inside the hula-hoop. See if you can find the things listed below. Draw or write what you find in the boxes.

Something eaten by an animal

An animal

Something from a plant

Something non-living

Something you think is special

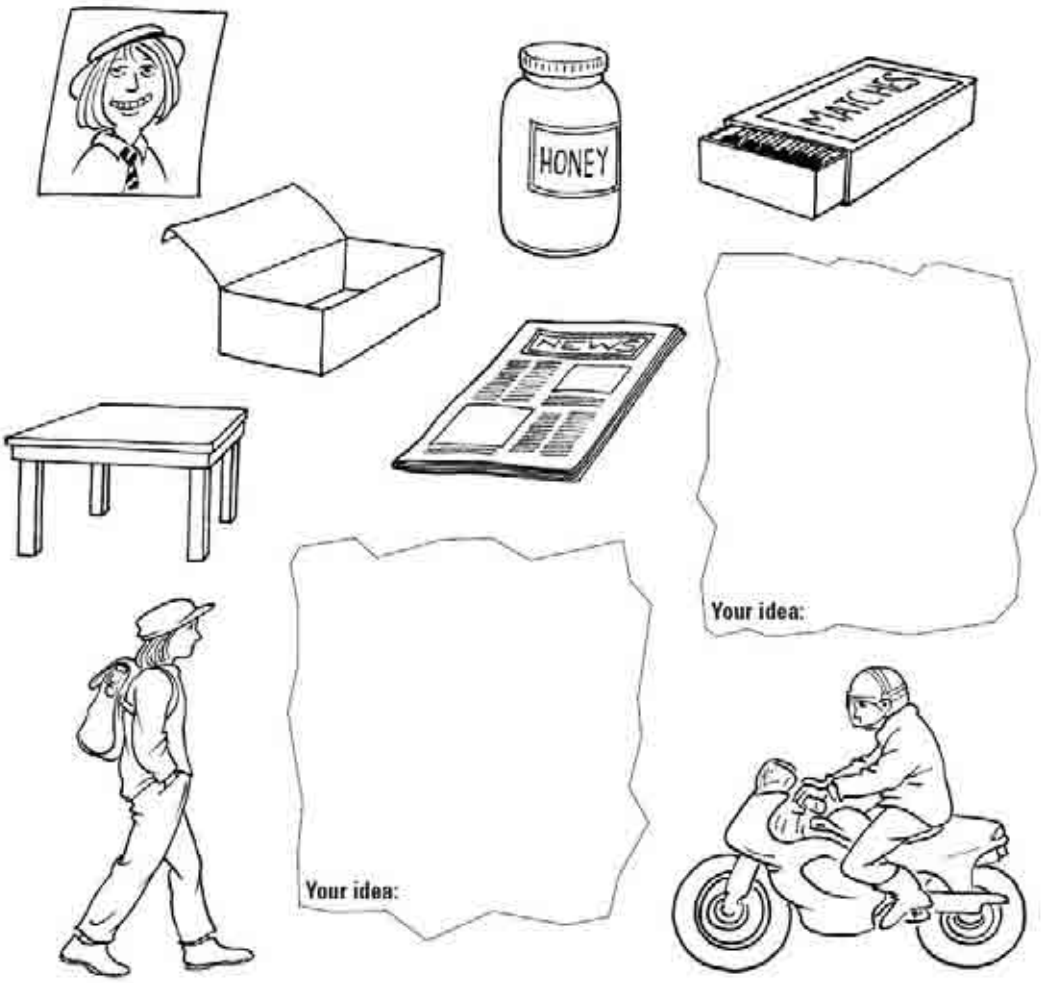
Forests are important…

You will need: coloured pencils

We use forests for lots of things. Look at the pictures of things made from forests.

Colour things made from wood brown.
Colour things made from paper blue.
Colour ways we enjoy the forest red.
Colour things we eat from the forest green

Draw two other ways that we use forests in the two empty spaces. Don't forget to use the correct colours.



What do plants need to grow?

You will need: radish or bean seeds, soil, pots, potting mix and containers

You are about to investigate what plants need to grow. Your class has been divided into 4 teams: Water, Soil, Light and Hot/Cold.

Different plants grow under different conditions. For example, some plants only grow where there is lots of rain, while others will only grow where there is sandy soil.

Each team will have 4 pots. Into each pot place 5 radish or bean seeds. It is important that the whole class use the same type of seeds.

In a good investigation everything is kept the same except for one thing. For example, the water team only changes the amount of water each of their pot plants get. The light team has 4 pots that are the same except that they all get different levels of light. The soil team keeps the water, light and location the same but changes the type of soil in each of their 4 pots.

The table below gives some ideas on what each team could change in their 4 pot plants.

	Pot Plant 1	**Pot Plant 2**	**Pot Plant 3**	**Pot Plant 4**
Water Team	No rain	Drizzle every 4 days	Drizzle every 2 days	Heavy rain every day
Soil Team	Stones	Sand	Sand and loam	Loam
Light Team	No light	Shaded area	Classroom	Full sun
Hot/Cold Team	Fridge	Shaded area	Playground	Under heat lamp

It is also important that all teams use the same materials or conditions as much as possible. The water, light and hot/cold teams should all use potting mix in their pots. The soil, light and hot/cold teams should use half a cup of water every couple of days. Whilst the water, soil and light teams should place their pots on window shelves in the classroom.

Your investigation will take about 3-4 weeks. Every 3 days you should record the number of seeds which have germinated and measure their height.

Results

1. Record your findings in a table like the one below.

Team Name: Soaked Seeds

Date	**Pot Plant 1**	**Pot Plant 2**	**Pot Plant 3**	**Pot Plant 4**
18/09/2010	No growth	Green shoots 3mm	No growth	1 seed has germinated

2. Present your team's results to the rest of the class.

3. As a team use the class results to decide which conditions best suit radish or bean seeds. Complete the table below:

	Water	**Light**	**Soil**	**Temperature**
Best Conditions				

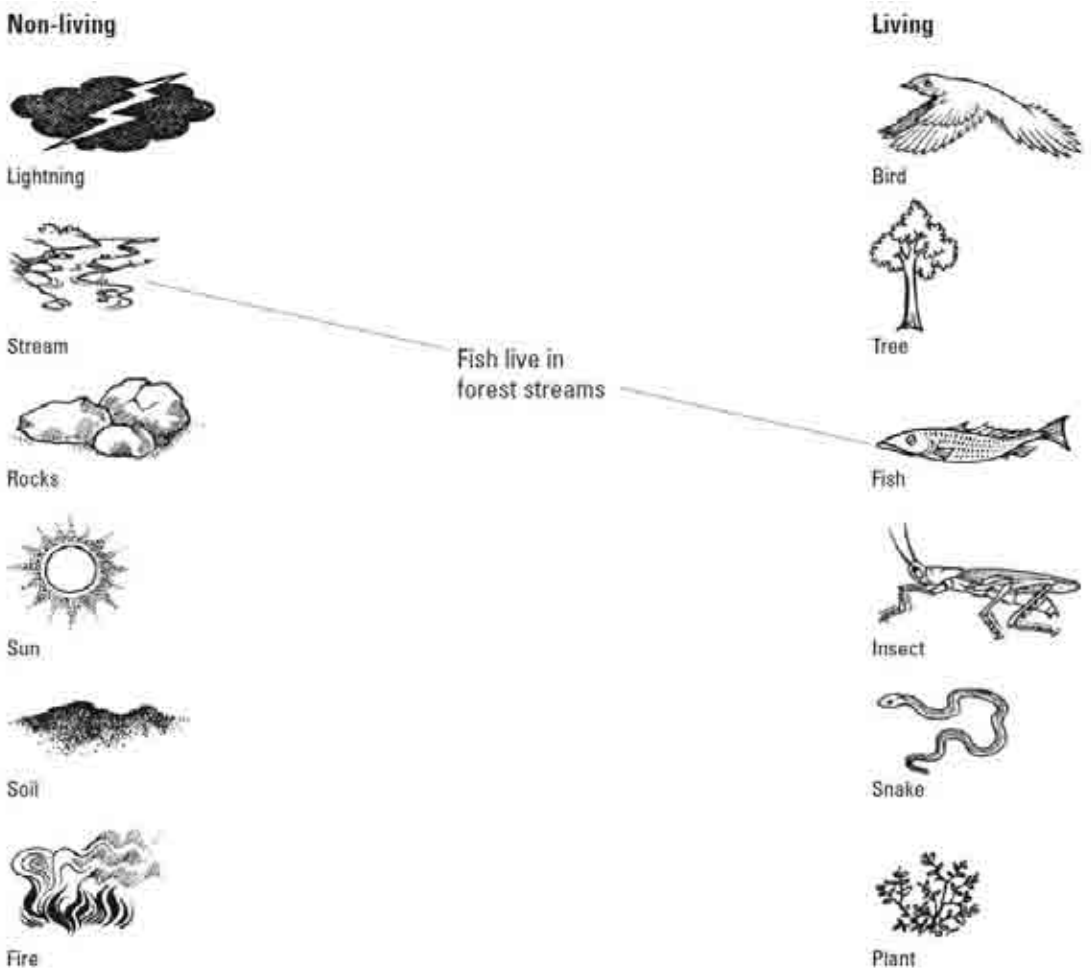
4. Set up a pot with 5 seeds. For 3-4 weeks grow them under what you think are the best conditions.
5. Did everyone in your class choose the same best conditions? Why/Why not?
6. How well did these seeds grow compared to your team's earlier results?
7. How well did these seeds grow compared to your classes' earlier results?
8. Would all plant seeds grow best under these conditions? Explain.

Seeking Survival

You will need: ruler

The non-living part of the forest affects the survival of living things. Living things have special features and behave in certain ways that help them survive. A possum's fur can help keep it warm in cold weather. A snake will only leave its shelter when it is warm outside.

Rule lines to join together words, for a non-living and living thing. Write along the line to show how the two words are linked. An example has been done for you.



Can you think of another example to show how living and non-living things are linked?

Non-living _____Living

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Fire Seasons

Forests are always changing. Plants flower, rain falls and some animals may die. Fire causes major changes to forests.

The four drawings below show what happens to a forest during and after a bushfire.

Number the images from 1–4 using the following information.

1. During the bushfire

2. A few weeks after a bushfire

3. 1 year after the bushfire

4. 10 years after the bushfire

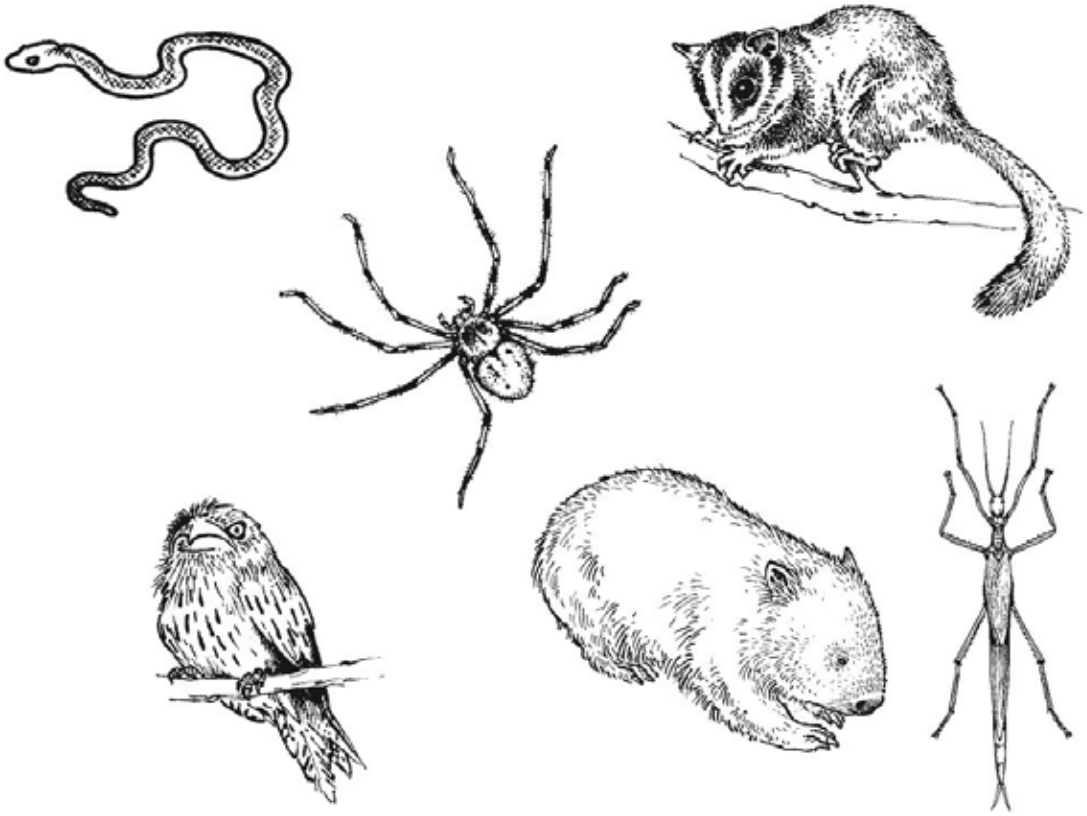
Number: _____

Number: _____

Number: _____

Number: _____

Circle the animal you think would have the best chance of surviving a bushfire.



Explain your choice to another student.

Place each of following words into sentences about bushfires:

survive, after, burrow

Forest Jigsaw

People view forests in many different ways. These views have also changed with time. A miner during the gold rush would view forests differently from a person going on a bush walk today.
The drawings below show different groups who use forests. Work in small groups and write how each group views the forest. This might include how they use the forest, how they change the forest or what they like about the forest.
You might like to give each group a name.

Share your ideas with the class. Choose one of the groups and write a forest tale about their life in the forest.

Forest Photos

If you enjoy nature, then it's great to be able to share it with people. Create a slideshow to show your friends and family the animals and plants around your school.

You will need: A digital camera, a computer, Photostory (free with Windows) or iPhoto (free with Mac)

1. Take your digital camera out into your school yard. If you can, have your teacher arrange a walking trip to a local park.

2. Photograph every animal and interesting plant you can find. If you are photographing birds, you may need a camera that can zoom. If you are photographing bugs or flowers, check that the photo isn't blurry after you take it.

3. When you get back to school, download all your photos onto your computer. Choose the best ones to go in your slideshow.

4. Using Photostory or iPhoto, put your photos together into a slideshow.

5. Add captions and music to go in the background.

6. Write a speech to go with your slideshow.

7. Invite parents, guests or friends to your classroom to watch your slideshow and listen to your speech.

www.edupics.com

Blooming Forests

More forest learning activities based upon Gardner's multiple intelligences, Bloom's taxonomy and VELS learning outcomes that can be undertaken before or after a visit to *Forest Secrets*.

	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Language	Make a list of things found in the forest	Write a TV script about an old tree, possum, moth and parrot explaining how they live in the forest	Design a crossword using forest terms	Write a story or poem about how forests are always changing	Write a letter to a newspaper explaining why we need to protect forests	Make a class book of photos and written pieces about forests and how we use them
Logic and Maths	Classify things found in the forest using headings like sharp, green, rough, soft	Show how plants take up water through their roots	Find a way to estimate the number of leaves on a tree	Demonstrate to the class how conditions in the canopy are different to the forest floor	Develop a class presentation on what would happen if there were no forests	Design an experiment to prove that some seeds need fire to germinate
Art and Space	Find six different types of leaves in your school grounds	Make a flow chart showing how forests change over a year	Design a t-shirt decorated with forest animals and plants	Visit a forest and investigate the plants found there	Develop a concept map showing how animals, plants and nonliving things all work together	Make a webpage showing how forests change over time
Music	Find a song or jingle about forests	Write a song about a forest plant or animal	Make a tape of forest sounds- birds, frogs, water. See if the class can identify the sounds	Research what trees are commonly used to make musical instruments	Create your own orchestra from instruments you have made from wood	Write and perform a song about the importance of forests
Movement	Make a chart showing one year in the life of a forest	In a group write a play about how peoples views of forests have changed	Make a model of a forest, with animals in the places they like to live	Demonstrate to the class how different leaf shapes and sizes can help different plants survive	Invent a machine for making dye from leaves and flowers	Make and conduct a survey finding out people's views about forests
Naturalist	Identify three birds in your school grounds	In the school grounds, use pictures or puppets to show where animals live	Sit quietly under a tree and observe all the animals that use the tree. Draw a map of the tree showing this	In your school ground or a local park, investigate which leaves are eaten by insects	Visit a nursery and find out which plants are native to the area. Plant a local native garden	Record changes that occur in a local park each season. Each term present your findings to the class
Understanding Others	Tell the class about some of the forest products you have in your home	In a group, write down all the parts of a plant and how they help it survive	Using newspapers and magazines, make a collage of images of the forest to display in your class	With a partner, brainstorm all the reasons why forests are important. Decide which are the two most important	Have your class develop a plan to introduce more plants to your school ground	Hold a debate on the topic 'Does it matter if we have less trees?'
Understanding Yourself	Throw a stuffed animal toy around in a circle. When you catch it, tell everyone your favourite animal	Imagine you are a tree fern. Write a journal about your life in the forest	Try some 'bush foods' from the supermarket. Report back to the class what you thought of them	Discuss how well you care for the forests of Victoria	Develop a plan for improving how you care for Victorian forests	Design and write a postcard to a pen pal explaining what you have learnt about forests