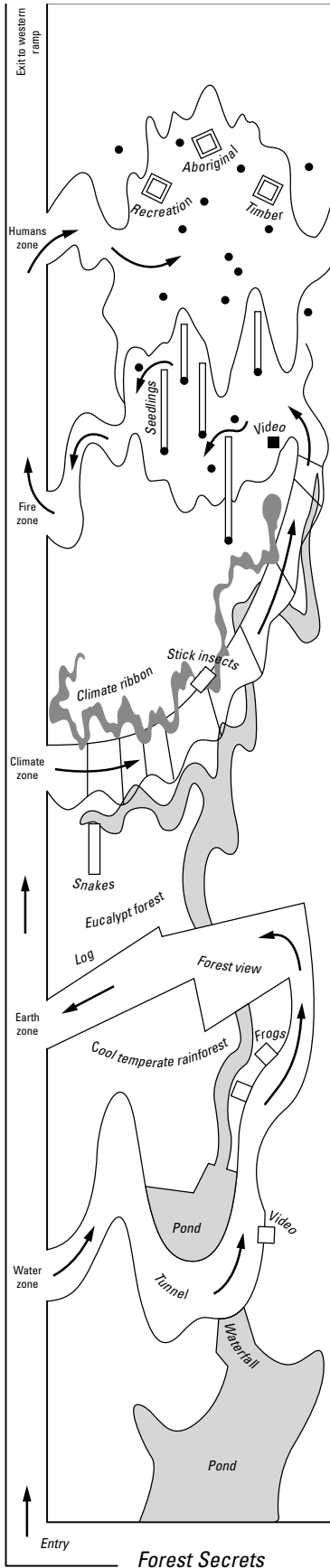


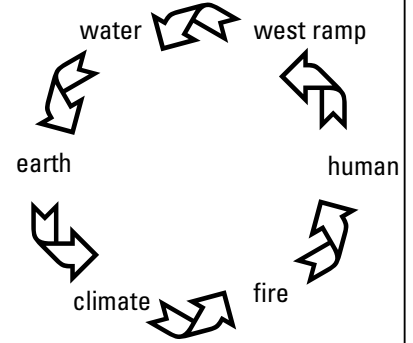


Forest Walk 1: Forest Connections



Before arriving, students should be divided into small groups and know which zone to start in.

The *Forest Secrets* Exhibition is divided into 5 zones: water, earth, climate, fire and human. Circle your starting point on the circular diagram and follow the sequence through the exhibition.



Water Zone: Frog Watch

The Southern Brown Tree Frog, Growling Grass Frog and the Rocky River (Lesuer's Tree) Frog are on display. They are closely related and share a number of features. The best way to identify frogs is by their calls, however this is not always possible so other features must be used.

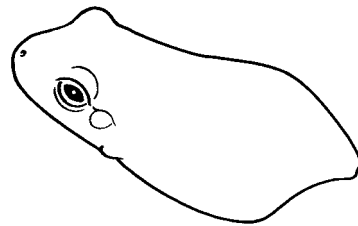
Look carefully at the frogs on display

- Using the frog outlines below, mark on the following features for each species.

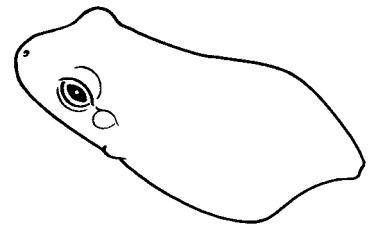
Skin Colour: mainly green **or** mainly brown

Warts: warts on back **or** smooth back

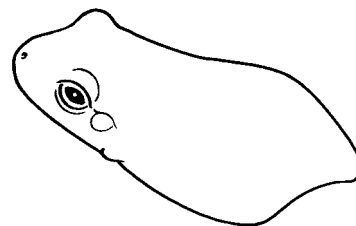
Digits: toe pads wider than digits **or** toe pads as wide as digits (drawing to show)



Southern Brown Tree Frog



Rocky River (Lesuer's Tree) Frog



Growling Grass Frog

Earth Zone: Old and New

In the past Australia was covered by different plants from the ones we see today.

Two types of forests exist in this area: Cool Temperate Rainforest (ancient) and Eucalypt (new).

Look up at the trees and other plants on your left and right.

- From your observations which of the following drawings shows a Cool Temperate Rainforest? Which drawing shows a Eucalypt Forest? Label the drawings correctly.



- Identify 2 ways in which these forests are different.

1 _____

2 _____

- Suggest which part(s) of the forest animals could use for

Food	Shelter

Climate Zone: Changing Seasons

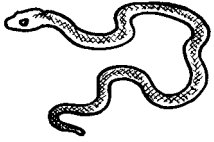
Forests are continually changing. Different plants flower at different times throughout the year. Some animals become less active during winter and spend these months in their burrows. Others, such as insects remain as eggs until the weather is warmer.

Look carefully at the Alpine Copperhead Snake on display

The Alpine Copperhead is usually one of the first snakes to appear in the spring.

Note: If the snake is not on display look at Cunningham’s Skink instead.

- Carefully observe the snake for 2-3 minutes and record what happens.

	<p>Alpine Copperhead Snake observations...</p>
---	---

- Match the months of the year with the snake’s activities

Months

September – November

November, December

January, February

January – April

April – August

August, September

Activities

Females give birth to live young

Hunt night & day to obtain food

Not feeding

Emerge to sunbake when warm

Pregnant females sunbake to help embryos develop

Mating

- Explain how conditions, such as climate, influence the Alpine Copperhead snake.

Fire Zone:

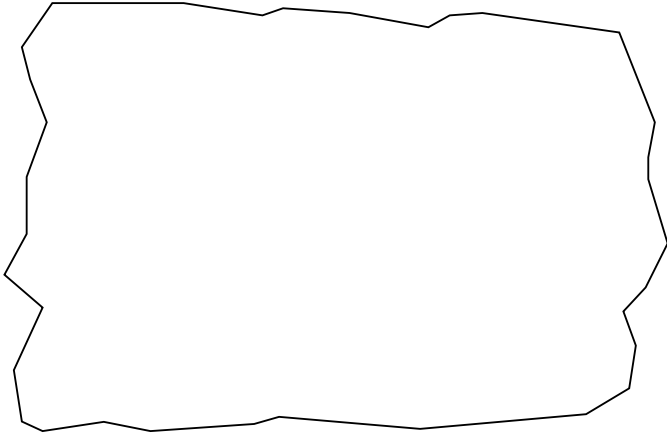
A bushfire through a forest has an immediate impact on the plants and animals found there.

Take a couple of minutes to watch the video screens located in the largest black pole.

- The drawing below shows a forest before a bushfire. In the box draw what the forest would look like after a major bushfire.



Before a bushfire



After a bushfire



- Think of four ways that a bushfire in a forest may impact upon the animals that live there.

1 _____

2 _____

3 _____

4 _____

- Select which animals you think would be first to come back to the forest after a bushfire?

birds possums insects

Explain your choice

At the base of some of the black poles there are rows of seedlings.

These represent regrowth after a fire.

- How long before one of these seedlings would have hollows for possums and birds to use as homes?

Less than 1 year 1-10 years 10-20 years

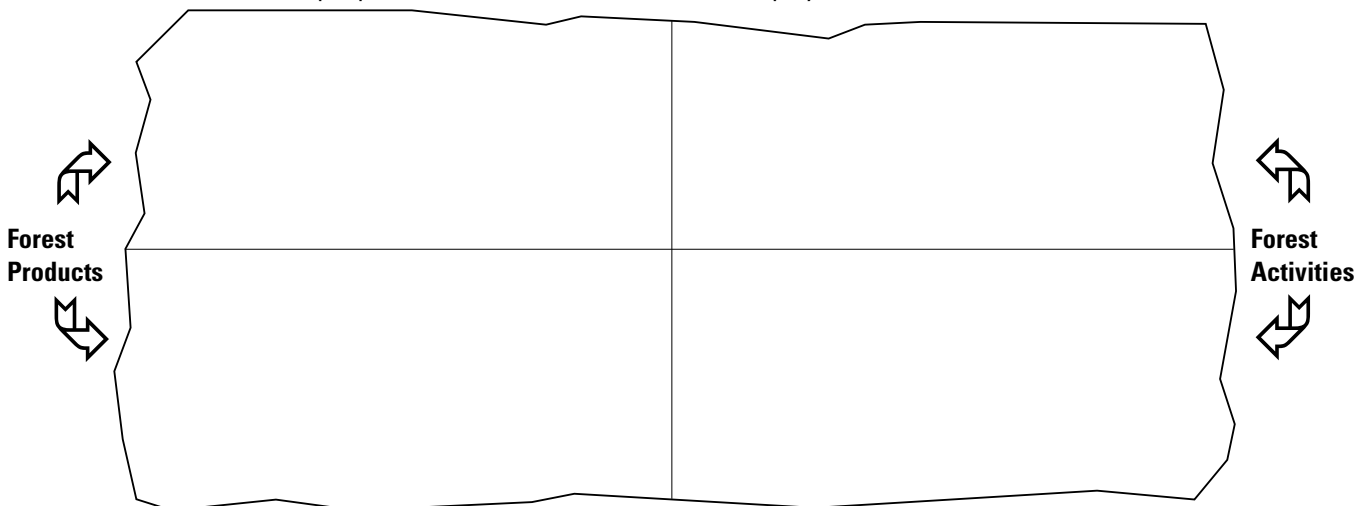
20-50 years 50 –100 years more than 100 years

Human Zone: Different Views

People have been using forests for a variety of activities including food gathering, mining, supplying water and timber harvesting for thousands of years.

At the base of the timber poles look at the contents of the three platforms.

- Draw or name 2 forest products that are on display.
- Draw or name 2 activities people undertake in forests that are on display.





- Write down how the following people might view or think about forests.











Don't forget to walk up the western ramp to get an overview of the Forest Gallery.

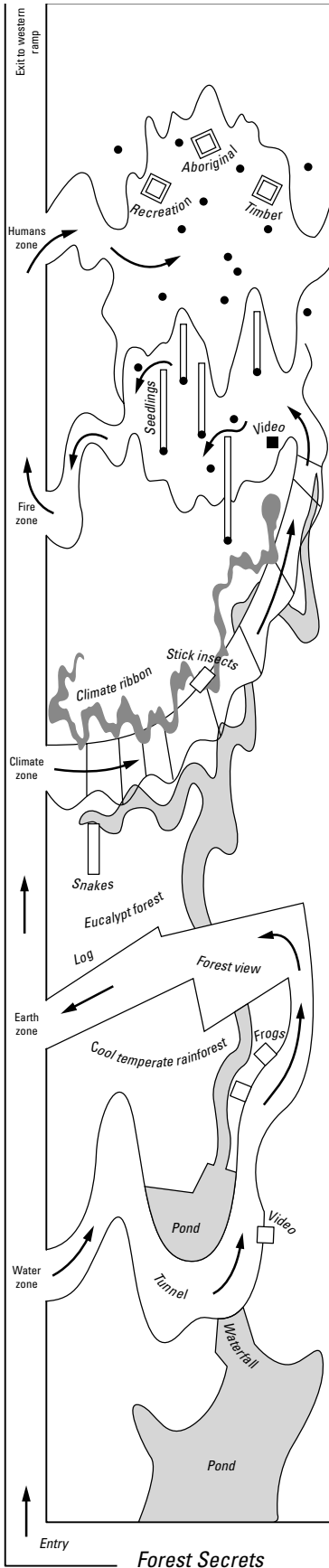
- Choose one zone from the exhibition and write your own question about one of the displays.

- Swap your question with a friend. Write their question below.

- Find the answer to your friend's question and write your response below.



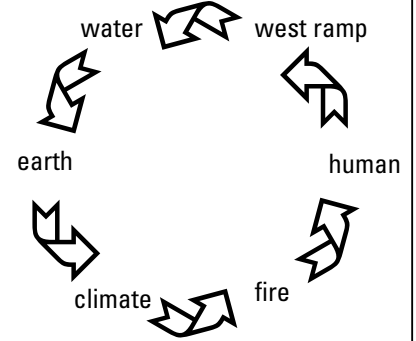
Forest Walk 2: Forest Changes



Teacher note:

Before arriving, students should be divided into small groups and know which zone to start in.

The *Forest Secrets* Exhibition is divided into 5 zones: water, earth, climate, fire and human. Circle your starting point on the circular diagram and follow the sequence through the exhibition.



Water Zone: Washed Away!!

Water is an important factor in changing the earth's surface.

Look through the window in the cave and watch and listen to the flow of water over the waterfall into the rock pool.

- This water flow would more easily wash away
 - soft, loose material **or** hard material
- How long would it take for this large rockpool to form?
 - Less than 1 year 10 years less than 100 years
 - more than 100 years more than 1000 years

Take a couple of minutes to watch the video presentations 'The Great Water' and 'Water: Shaping Victoria's Mountain landscape'.

One of the stories explains how Aboriginal people believe the Yarra River and Port Phillip Bay was created.

- Barwool and Yan-yan looked for soft ground when using their axes. How is this similar to a scientific explanation of the action of water and weather?

Earth Zone: On the Move!

40 million years ago Australia's forest cover was very different from what we see today.

Look at the maps and information on each side of the earth wall.

- 70 million years ago Australia was once part of the super-continent:
 - Laurasia Goondawindi Gondwana Leongatha



• Read through the following events in Australia's history. Place them in the correct order by numbering them from 1-6.

- Australia is part of the super-continent Gondwana
- Australia's climate becomes drier and more fire prone
- Southern beech forests appear
- Australia separates from Gondwana and moves north
- Australia's climate is cool and moist
- Eucalyptus* plants appear

• Circle the correct answer. These changes to Australia occurred over:

one
year

hundreds
of years

thousands
of years

millions
of years

Climate Zone: A different perspective!

The Kulin people lived on the land to the east and north of Melbourne. The Kulin calendar is divided into 7 seasons and is based upon detailed knowledge and understanding of the land, plants and animals.

Look carefully at the glass ribbon display located beside the boardwalk (both sides of Stick Insect display).

It contains images and text on the seven Kulin seasons.

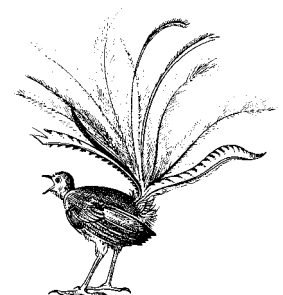
- Identify the Kulin season where the following changes occur:
 - Southern Cross is high in the south at sunrise
 - bowat is long and dry
 - high temperature and low rainfall

The Kulin season is:

Do you think this season would correspond with:

- Summer Autumn Winter Spring

• If you were looking at a Dhuling what would you be watching?

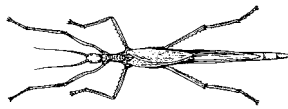


- Why is this animal active during the kangaroo-apple season?

Look closely at the stick insects on display

These animals feed upon plants. From February to June they lay eggs which drop to the ground. Young stick insects emerge and must climb onto eucalypt foliage within 1-3 days of hatching.

- Carefully observe a stick insects for 3-4 minutes and record what it does.



Stick Insect observations...

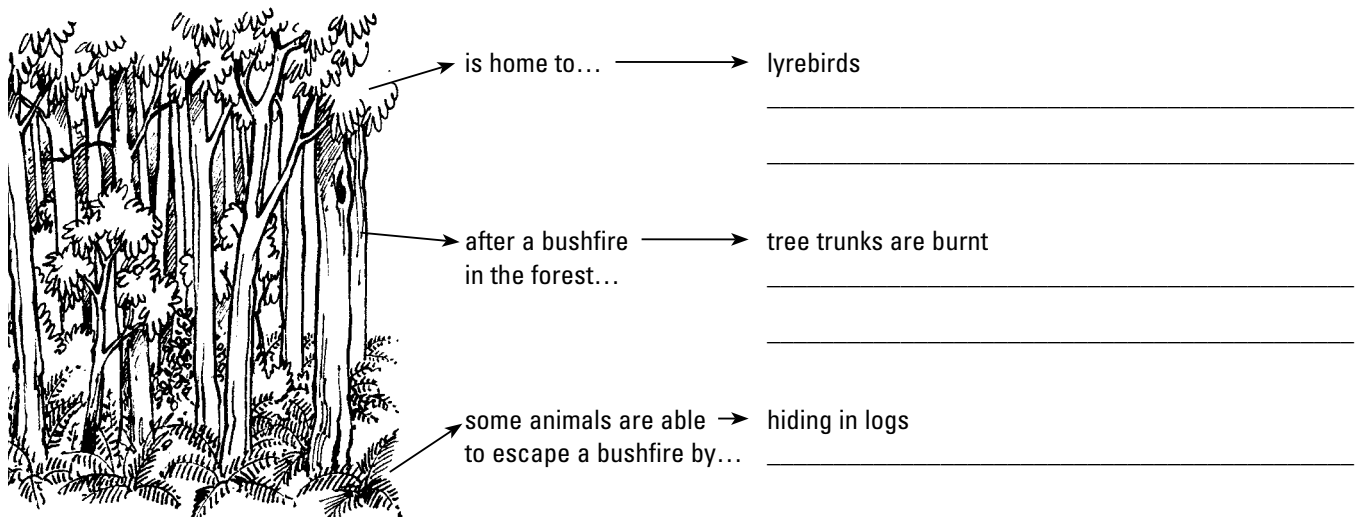
- When do the following changes occur during the year?
- eggs hatch _____
- most adults die _____
- nymphs mature into adults _____

Fire Zone: Burning Issue!

For people and animals living in the mountains to the east of Melbourne forests are both home and hazard.

Take a couple of minutes to watch the video screens located in the largest black pole.

- Complete the following diagram by filling in the missing spaces





- List 3 ways that a bushfire can impact upon people living in forest areas.

1

2

3

- Complete the empty bubble to explain how you would feel if where you lived had recently experienced a bushfire.

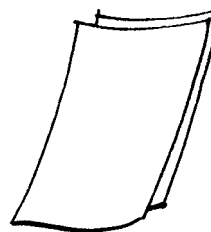
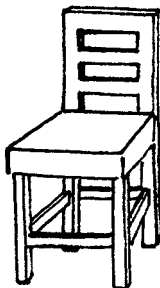
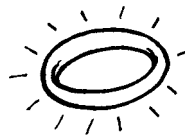


Human Zone: Changing Views

People have been using forests for a variety of activities including food gathering, mining, supplying water, walking and timber harvesting for thousands of years.

At the base of the timber poles look at the contents of the three platforms.

- Circle which of the following is the odd one out.



- Justify your decision

- People view forests in different ways depending upon how they use these areas.



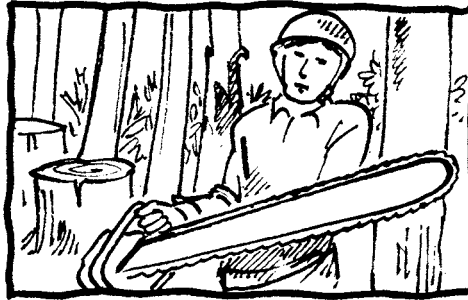
Complete the following table using the terms below to illustrate how different groups of people view forests. Terms can be used more than once.

products
fitness
identity
home

shelter
play
history
resource

enjoyment
diet
income
wood

nature
work
tranquillity
adventure

View of Forest	
	
<p>Aboriginal person</p>	
	
<p>Recreation or holiday maker</p>	
	
<p>Timber worker</p>	



Don't forget to walk up the western ramp to get an overview of the Forest Gallery.

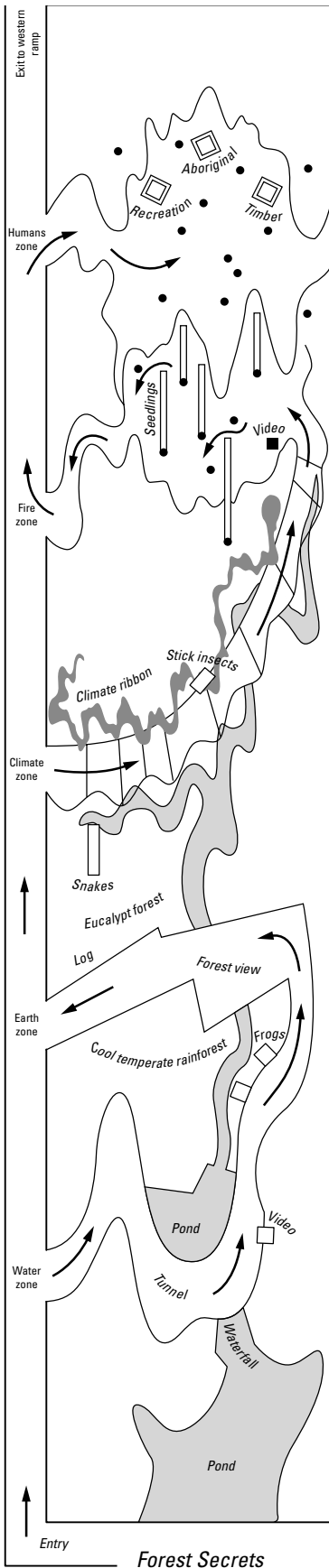
- How would this forest change during 1 day?

- Think of 4 words that you would use to describe Victoria's forests?

1 _____ 2 _____
3 _____ 4 _____



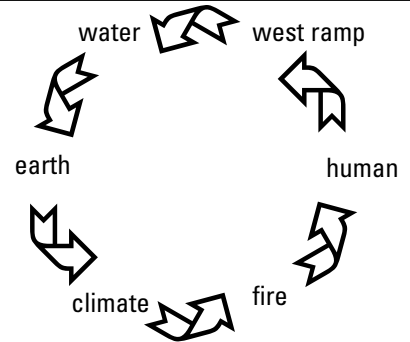
Forest Walk 3: Forest Patterns



Teacher note:

Before arriving, students should be divided into small groups and know which zone to start in.

The *Forest Secrets* Exhibition is divided into 5 zones: water, earth, climate, fire and human. Circle your starting point on the circular diagram and follow the sequence through the exhibition.

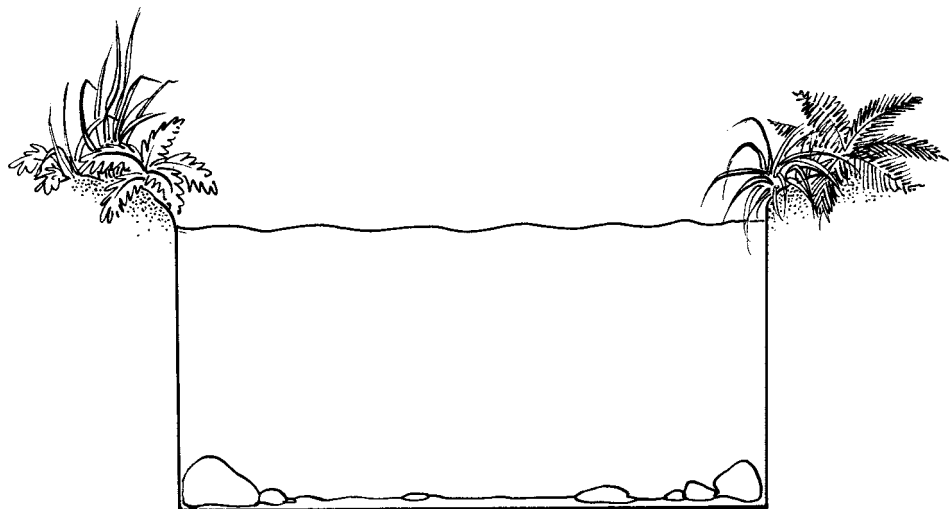


Water Zone: Clean Catchments

Clean water is an important resource. Forests play an important role in ensuring that the quality of our water remains high.

For 4-5 minutes observe the movement of the different fish species in the pond.

- Label on the pond diagram below where the different species of fish can be found.



- Write down the activities you observed

Whilst I was watching the fish they...



Look up through the water towards the banks of the pond

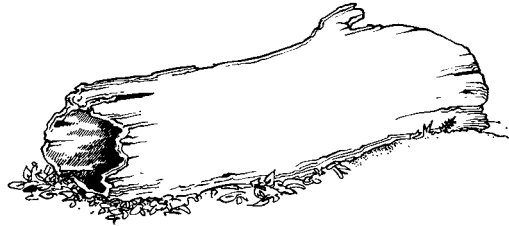
- Suggest what changes might occur in the pond if the plants on the banks were removed?

Earth Zone: Hanging On!

In a forest there are many different types of trees and other plants. Some are only a few centimetres tall whilst others can grow up to 70 – 80 metres.

Look carefully at the large log lying on the forest floor.

- On the log drawing below include a sketch of two plants



- State 3 ways in which the plants on the log are different from the surrounding trees and other plants.

1 _____

2 _____

3 _____

- Besides plants what evidence is there of other living things using the log?

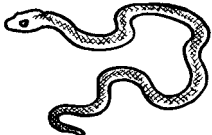
Climate Zone: Changing Seasons

Look carefully at the Alpine Copperhead Snake on display

The Alpine Copperhead is usually one of the first snakes to appear in the spring.

Note: If the snake is not on display look at Cunningham’s skink instead.

- Carefully observe the snake for 4-5 minutes. What did it do?

	<p>Alpine Copperhead Snake observations...</p>
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- In which season would this snake be most active?

Summer
 Autumn
 Winter
 Spring

- In which season would it mate?

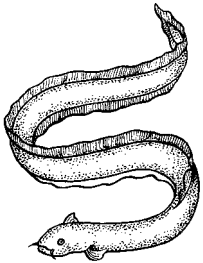
Summer
 Autumn
 Winter
 Spring

- Why is this snake less active during winter?

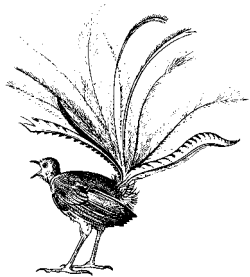
The Kulin people lived on the land to the east and north of Melbourne. The Kulin calendar is divided into 7 seasons and is based upon detailed knowledge and understanding of the land, plants and animals.

Look carefully at the glass ribbon display located next to the boardwalk (both sides of Stick Insect display). It contains images and text describing the seven Kulin seasons.

- Which Kulin season are we currently in? _____
- Match the Kulin language terms with the following plants and animals:



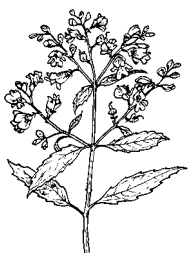
Bulen-bulen



Corranderrk



Iuk



Kombadik



Fire Zone: Hot Stuff!

A bushfire through a forest impacts not only on the trees and other plants but also upon the people and animals who call these areas home.

Take a couple of minutes to watch the video screens located in the largest black pole.

- From the video identify 5 animals that live in forests. Discuss with another student how these animals could escape from a bushfire and give their chance of survival a rating:
No hope, not bad, looking good, sure thing!

Forest animal	This animal could escape from a bushfire by...	Survival rating
1		
2		
3		
4		
5		

- Find a partner. One of you argues why bushfires are bad for forests whilst the other argues why bushfires are good for forests. Put your ideas onto the diagram below:

Bushfires are good because...

Bushfires are bad because...





Human Zone:

People have been using forests for a variety of activities including food gathering, mining, supplying water, walking and timber harvesting for thousands of years.

At the base of the timber poles look at the contents of the three platforms.

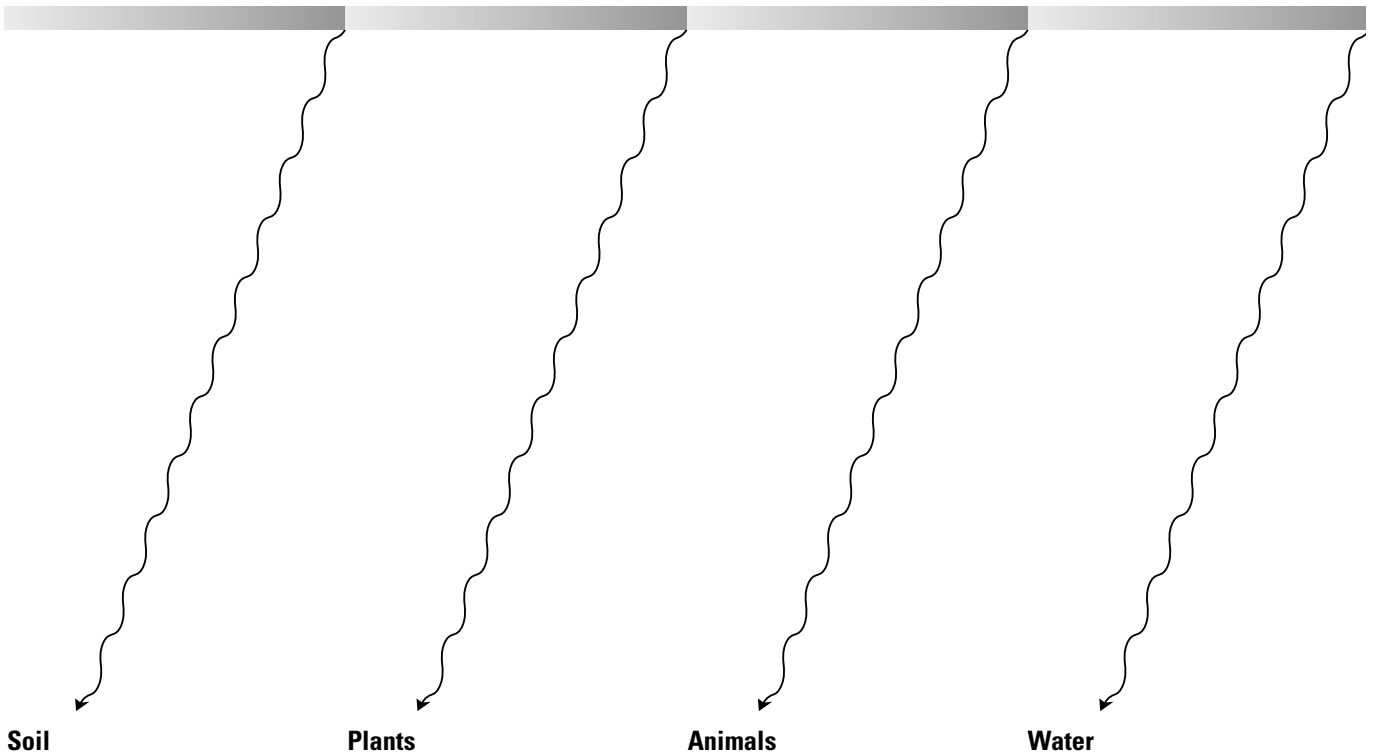
- From your observations identify 3 ways in which people use forests.

1 _____ 2 _____ 3 _____

Look at the trees and other plants in this exhibition and think about the different parts that make up a forest: plants, water, soil and animals.

- Choose 1 of your answers from the question above and consider how it might affect different parts of the forest. Write an idea on each of the lines below:

Forest Use:



On the timber poles there are a number of quotes by different people expressing their views about forests. Read through these quotes.

- Imagine that you have been asked to submit a quote about how you view forests. What would you write?



Western Ramp: Forest Overview

Select a spot along the ramp that allows you to view the plant layers within the Forest Gallery.

- Using the space provided below sketch some of the trees and plants. Look carefully at the size of the plant, the shape of the leaves and stem/trunk coverings before starting your sketch.

Forest Gallery Plant Profile

Canopy

Understorey

Ground Cover

- Develop a key to show where in the forest the following would be located: animal homes, animal food, and products that people use. Include this information on your sketch.