Forest Walk 1: Forest Homes

Adult led walk
The questions are to assist with student discussions along the Forest Walk. At school, your group will have been told 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: Freshwater Homes
Many animals live in forest creeks, streams and the surrounding banks.

Carefully observe the pond for 5 minutes to see where various animals can be found.
• How many fish can you see?
• How many different types of fish can you see?
• Do all the fish swim together in the same area?
• What part of the pond does the Spiny Crayfish use to burrow or hide?

Walk on a little further to the frog displays.
• Are the frogs on plants, glass, rocks or in water?
• How many toes do the frogs have?

Earth Zone: Tall Trees
Forest plants are home to many animals including mammals, birds, insects and spiders.
Two types of forests can be seen here: cool temperate rainforest and eucalypt.

Look up at the trees and other plants on your left and right.
• Can you see any places that animals might use as homes?
• Where might possums live in the forest?
• What animals live under the bark of trees?
• Where would you like to live in the forest?
Climate Zone: Seasonal Change

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 may have different stages to get them through the colder months.

Look closely at the Stick Insects on display

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

- How many stick insects can you see?
- Why are they called stick insects?
- Do stick insects feed upright, hanging upside down or both ways?
- How does the stick insect’s shape and colour help it to live in its plant home?

Fire Zone: Burnt Out

Bushfires can kill forest trees and animals. However, some trees don’t die, and some animals run or fly away. After a bushfire some plants produce lots of seeds which germinate and start to grow.

Look up at the black poles.

- Why are there black poles here?
- What might happen to animal homes during a fire?
- How do birds try to escape from a fire? What do you think other animals like fish, snakes, wombats and stick insects do?

Look back towards the living trees and other plants

- Can you see any parts of the forest that animals might use for food?
- After a bushfire what happens to this food?

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

These seedlings would provide food for animals after a fire.

- What sorts of animals would like to have a nibble?
Human Zone: Where have the animal homes gone?

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

Think about your daily life:

• What things do we use that are made from wood?
• Where in the forest does the wood come from?
• How can we protect animal homes and also have things made from wood?

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

• Are all the trees and other plants the same size?
• Which is your favorite tree or favorite part of the forest?
Water Zone: Liquid Forces
Water has been an important factor in changing the earth’s surface.

Look through the window and watch and listen to the flow of water over the waterfall into the rock pool.
- What would happen to any stones, small rocks or loose soil?
- Why isn’t everything washed away?
- Guess how long it might take for a rock pool this size to form? A day, a week, a year, many years?

Earth Zone: Two forests
In the past Australia was covered by different plants from the ones we see today.

Two types of forests can be seen here: Cool Temperate Rainforest (ancient) and eucalypt (new)

Look up at the trees on your left and right.
- How are the leaves on the trees different?
- Is there anything the same about the leaves?
- How are the tree trunks different?
- Is there anything the same about them?
- How many different types of trees can you see?
**Climate Zone: Seasonal Change**

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.

**Look carefully at the Alpine Blue-tongues on display**

This is a large species of lizard found in Southeastern Australia. It likes to live in rock crevices and rocky outcrops. Like other lizards, this species obtains the body warmth necessary to move and function from basking in the sun.

Locate the skink in its cage.

- What is the blue-tongue lizard doing?
- Watch the blue-tongue lizard for 2-3 minutes. What did it do?
- Do you see blue-tongue lizards in the forest all year round? Why/Why not? *
- How do blue-tongue lizards keep warm?
- Where might blue-tongue lizards go when they get too hot?

**Fire Zone: Burnt Out**

Bushfires can kill forest trees and animals. However, some trees don’t die, and some animals run or fly away. After a bushfire some plants produce lots of seeds which germinate and start to grow.

**Look up at the black poles and watch the video screens on the large black pole.**

- Why are there black poles here?
- What might happen to trees and other plants during a bushfire?
- Why might there be fewer animals in a forest after a bushfire?
- How might birds escape from a bushfire? What do you think other animals like fish, snakes, wombats and stick insects do?

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

- Guess how long it would take for seedlings to grow into a big tree? A day, a week, a year, many years?
Human Zone: Fantastic Forests
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 pale timber poles look at the contents of the two platforms.
• Have you ever visited a forest?
• What did you do there?
• How do other people use forests?
• What parts of the forest do they use?
• Should we look after forests? Why / Why not?

Don’t forget to walk up the western ramp to get an overview of the Forest Gallery.
Look up at the tallest trees
• What will happen to the tall trees if they keep growing?
• How would you stop them from growing through the roof?

*Did you find the blue-tongue in the winter months? During the colder months the lizard will be hibernating in a crevice and you will not see it even though it is still there.
**Teacher note:**
Before arriving, students should be divided into small groups and know which zone to start in.

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**Water Zone: Frog Hollow**

Forest ponds and streams contain fish, frogs and other animals. In recent years frog populations have decreased. We don’t know why.

**Look carefully at the Rocky River Tree Frog on display**

- Draw in the frog’s legs and toes on the following drawing.

![Frog drawing]

- How does this frog stay on the slippery rocks?

- Frogs have sensitive skin and they don’t have sunblock!
  Do you think they would be more active during the
  
  □ day  or  □ night
Earth Zone: Hanging On

In the 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 drawing below sketch two plants that live on dead logs.

• How are the plants on the log different from the surrounding trees?

The plants on the log are:

a) [ ] Taller [ ] Same size [ ] Smaller

b) [ ] Covered in bark [ ] Not covered in bark

One other difference: ________________________________

Climate Zone: Is anyone there?

Forests include animals such as birds, mammals and reptiles as well as many strange looking insects and spiders.

Look closely at the Stick Insects on display

These animals feed on 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.

- Circle the correct drawing showing how stick insects feed

Upright or hanging upside down or both directions
• The stick insects are eating

☐ bark    ☐ leaves    ☐ fruits/nuts    ☐ other __________

• What makes the stick insects hard to see? (you can tick more than one answer)

☐ colour    ☐ size    ☐ shape    ☐ body covering

• Select one of the stick insects and complete the following table:

<table>
<thead>
<tr>
<th>Feature</th>
<th>My stick insect …</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td></td>
</tr>
<tr>
<td>Length (cm)</td>
<td></td>
</tr>
<tr>
<td>Number of legs</td>
<td></td>
</tr>
<tr>
<td>Body Covering (soft, hard, hairy etc)</td>
<td></td>
</tr>
<tr>
<td>Something special I can see…</td>
<td></td>
</tr>
</tbody>
</table>

**Fire Zone: Hot Stuff**

Bushfires have an immediate impact on forests as many plants and animals are killed or injured.

**Watch the video screens on the large black pole and then look back towards the living trees and other plants.**

• Can you see any places or parts of the forest that animals might use for homes or food?

On the forest diagram below, draw lines to show the parts of the forest which animals could use as homes or for food.
• What happens to these homes and the supply of food after a bushfire?

Look at the black poles in this area
Dead, blackened trees often remain after a bushfire.
• Suggest which animals might use dead trees and how they might use them.

At the base of the black poles there are rows of seedlings.
These represent regrowth after fire.
• Guess how long before some of the tree seedlings would have hollows for possums to use as homes?

☐ Less than 1 year  ☐ 1 – 10 years  ☐ 10 – 20 years
☐ 20 – 50 years  ☐ 50 – 100 years  ☐ over 100 years

Human Zone: A variety of uses
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 investigate the contents of the two platforms.
• For each of the people drawn below write a sentence explaining how they use the forest. The first one has been completed for you.

I love working with wood and making furniture
• Think about your lifestyle and the things you use everyday.

• Tick the following forest activities that you have been involved in

**Forest activities**

☐ picnic  ☐ camping  ☐ fire fighting

☐ bushwalking  ☐ searched for gold  ☐ collecting fire wood

☐ scenic driving  ☐ trail riding  ☐ hunting & shooting

☐ bird watching  ☐ other ____________________________

• Tick the following forest products that you have used.

**Forest products**

☐ paper  ☐ wooden pencil  ☐ tap water

☐ wooden chair  ☐ Other ____________________________

• Find a quiet spot in the Forest Gallery and think of 5 words that you would use to describe your views or feelings about forests.

1 ______________________  2 ______________________  3 ______________________

4 ______________________  5 ______________________

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

• If all the trees and other plants were removed. What could happen to the soil?
Water Zone: Bay Watch

People have always been interested in explaining how mountains, rivers and bays formed. Both storytelling and science provide explanations.

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

• Not everything is washed away because some things are
  □ too soft    □ too hard    □ too heavy    □ fixed in place

Take a couple of minutes to watch the video ‘The Great Water’.

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

□ three giant kangaroos used their paws to create the Yarra River
□ a huge storm washed away all the soil and filled the land with water
□ two Aboriginal men using axes cut their way through the land to form the Yarra River

Earth Zone: Forest Senses

A long time ago much of Australia was covered in rainforest. As Australia became drier and bushfires more common eucalypt forests replaced the rainforest.

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

• Use your senses to explore these two forests. Draw or describe what you discover about the forest in the boxes below

I can smell…  I can see…  I can hear…
Climate Zone: Changing Patterns
The Kulin people lived on the land to the east and north of Melbourne. The Kulin calendar year is divided into seven seasons.

- Look carefully at the glass ribbon display near the boardwalk, (both sides of Stick Insect display). It contains images and information on the seven Kulin seasons.
- If you were watching a bulen-bulen what would you be looking at? Circle the correct drawing.

- Identify the Kulin season in which the following changes occur:
  - Sagittarius rises in the south-east after sunset
  - Cool, rainy days
  - Wombats (waring) graze in the sunshine
  - Days are short and nights are long

The Kulin season is: _____________________________

Do you think this season would occur in

☐ Summer  ☐ Autumn  ☐ Winter  ☐ Spring

What Kulin season are we now in? ___________________________
• Using the information on the ribbons find an example of:
  an animal used by the Kulin people for meat: _______________________
  a plant used by the Kulin people for food: _______________________

• Write down a Kulin name for a plant or animal. Back at school use this information to put together a display showing the plant or animal, Kulin name and English name.

<table>
<thead>
<tr>
<th>Kulin name</th>
<th>English name</th>
</tr>
</thead>
</table>

**Fire Zone: Hot Stuff**

For people living in the mountains to the east of Melbourne, forests are both home and hazard. On scorching hot days in summer, Melbourne holds its breath as a wisp of smoke can signify disaster.

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

• Put yourself in a firefighter’s boots. How would you feel? What would it be like if you were fighting a bushfire?

• Circle the 5 words you think best describes a bushfire in a forest:

  - hot
  - wet
  - burning
  - smoke
  - freezing
  - death
  - quiet
  - injuries
  - panic
  - calm
  - ugly
  - cold
  - flames
  - bad
  - regrowth
  - good
  - loss
  - safety
  - benefit
  - spectacular
  - lost
  - noisy
  - eerie
  - living
  - grief
• Choose two other words, not from the list above, that you would use to describe a bushfire:

1 ___________________ 2 ___________________

**Human Zone:**

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

*At the base of the timber poles look at the contents of the two platforms.*

• Find an example of an object or image for each of the following:

  something you might find in your home ___________________________

  something you might wear ___________________________

  a way you might enjoy the forest ___________________________

  how you might feel about the forest ___________________________

• Can you think of any other reasons why forests are important?

  __________________________________________

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