TERRIFIC TREES

Task Card 1

TREE TRIVIA

After reading the topic page – Terrific Trees – see if you can answer these questions.

1.What is the central column of a tree called?

_____

2. What is the process by which a tree turns sunlight into food?

_____

3. What height can a mature plant be called a tree?

_____

4. What do trees store in their wood?

_____

5. How do trees improve water quality?

_____

6. How can scientists determine how old a tree is?

_____

7. What is the study of trees called?

_____

8. How much shorter than 100 metres is Australia's tallest tree?

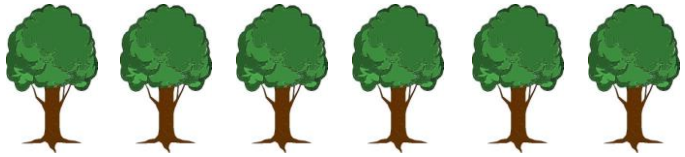
_____

9. What is the name of the biggest Mountain Ash in Tasmania?

_____

10. What date is national Tree Day this year?

_____



TERRIFIC TREES

Task Card 2

PoeTREE

The poem below describes some aspects of trees as well as being written in a way that shows the basic shape of a tree.
Have a go at writing a poem about trees. Include words associated with trees and write it in such a way that the shape of the poem branches out!

Think Like a Tree

by Karen I. Shragg

Soak up the sun
Affirm life's magic
Be graceful in the wind
Stand tall after a storm
Feel refreshed after it rains
Grow strong without notice
Be prepared for each season
Provide shelter to strangers
Hang tough through a cold spell
Emerge renewed at the first signs of spring
Stay deeply rooted while reaching for the sky
Be still long enough to
hear your own leaves rustling.

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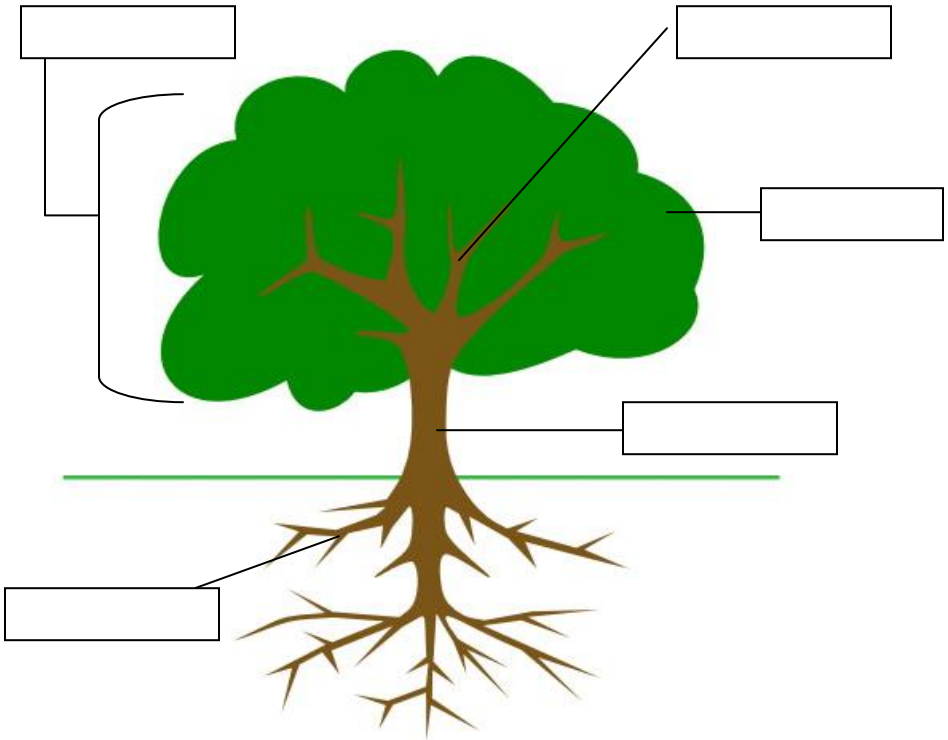
Task Card 3

LABEL A TREE

- Use the list of words to label the parts of the tree. Match the parts with its description.

branches **crown** **leaves** **roots** **trunk**



- A limb or offshoot of the main trunk of the tree
- The part of the tree that grows downwards into the soil anchoring the tree and absorbing nutrients and moisture.
- The outgrowth where the process of photosynthesis takes place
- The branches, leaves and reproductive structures extending from the trunk.
- The part that connects the crown with the roots

- Below is a cross section of a tree. Use the descriptions to label the parts of the trunk. They are listed in order.

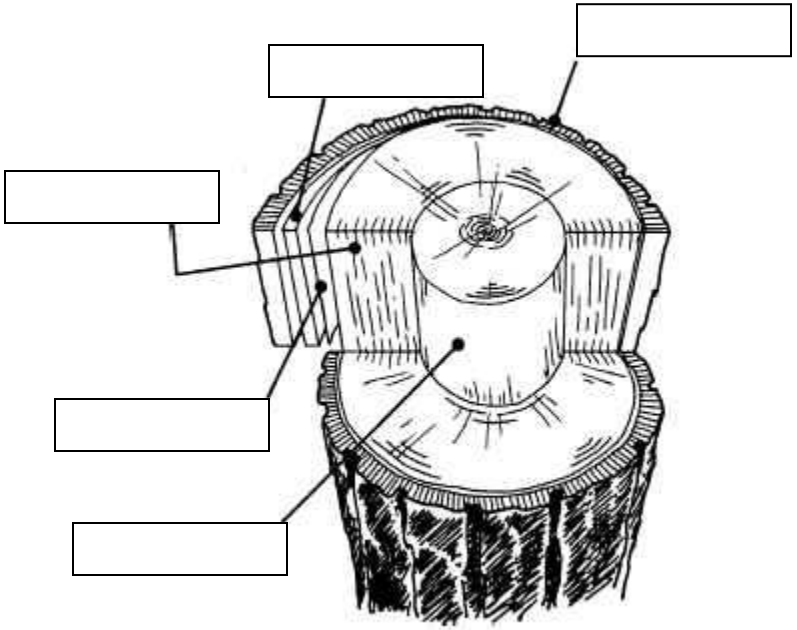
The OUTER BARK is the tree's protection from the outside world.

The INNER BARK or PHLOEM is the pipeline through which food is passed from the leaves to the rest of the tree.

The CAMBIUM is the growing part of the trunk. It produces new bark and wood.

The XYLEM or SAPWOOD is the tree's pipeline for water moving up to the leaves.

The HEARTWOOD is the central supporting pillar of the tree.



TERRIFIC TREES

Task Card 4

MEASURING TREES

How do you measure the height of something really tall like a tree? Here is a method that uses shadows to find an estimate of the height of a tree. Follow the directions and measure some trees at your school. For best results do this on a bright sunny day and use a long measuring tape.

Step 1
Measure your height

Step 2
Measure the length of your shadow from your feet to the tip of your shadow.

Step 3
Measure the length of the tree's shadow from the base of the tree to the tip of its shadow. This works best if the ground along the shadow is level. Do this as quickly as possible because the sun's position in the sky is changing and therefore the length of the shadow will change.

Step 4
Calculate the tree's height by multiplying the length of the tree's shadow by your height and then divide that result by the length of your shadow.
eg. If you're 1.5 metres tall and your shadow is 2.4 metres and the tree's shadow is 30.48 metres, the height of the tree is:-

(30.48m x 1.5m) ÷ 2.4m = 45.72m ÷ 2.4m = 19.05 m

TERRIFIC TREES

Task Card 5

ADOPT – A - TREE

Choose a tree in your school grounds. Adopt this tree and keep a record of information about your tree.

- Identify the common and scientific name.
- Measure the height of the tree.
- Measure the tree trunk's circumference 1 metre from the ground.
- Measure the length and width of a leaf.
- Identify any animals you see on or near your tree.
- Sketch a leaf.
- Sketch the tree's shape. Identify which shape it is using the guide below.
- Sketch the seeds/fruit.
- Make a leaf rubbing.
- Make a bark rubbing.
- Note any changes to your tree over a period of time.

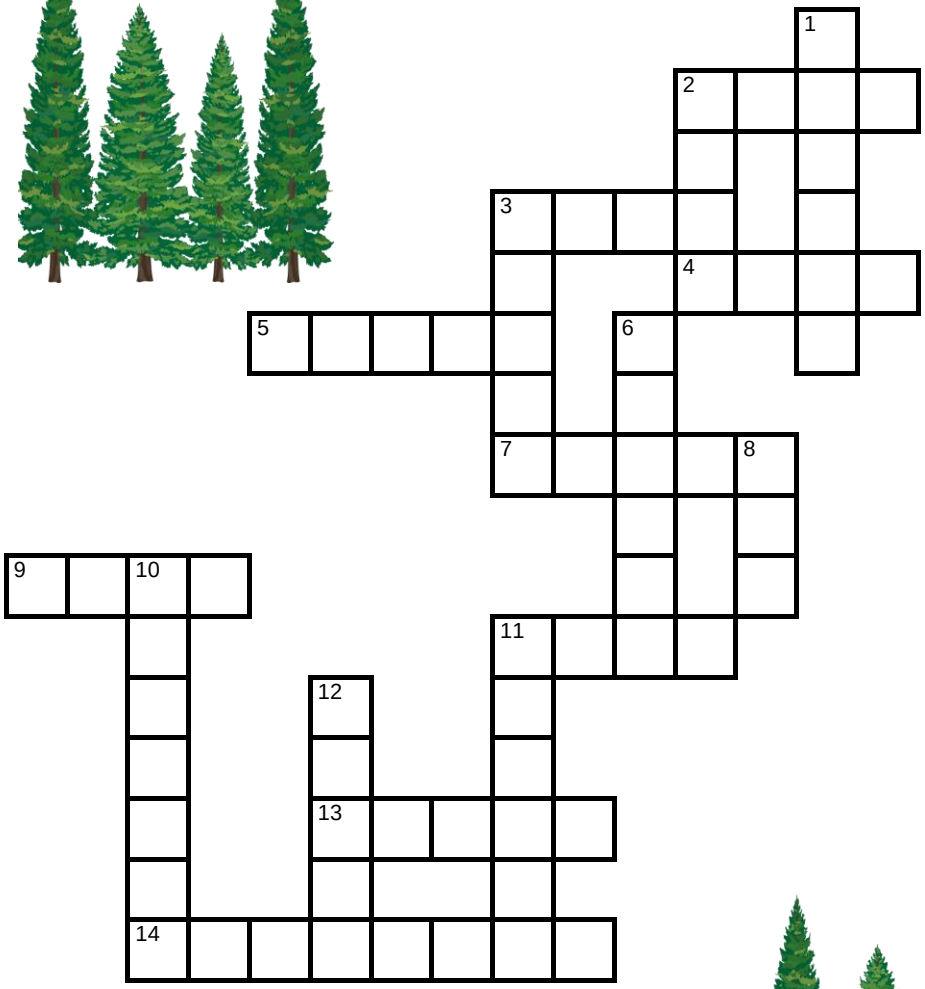
Identifying Shapes of Trees

round | vertical oval | horizontal oval | v-shape | pyramidal (triangular) | columnar (tall &thin)

TERRIFIC TREES

Task Card 6

TREE CROSSWORD



Across

2 These insects often pollinate trees. (4)

3 A building material that comes from trees. (4)

4 This can grow into a new tree. (4)

5 Apples, oranges, or bananas. (5)

7 The part of a tree that attaches it to the ground and soaks up water. (5)

9 Where the seed of a pine tree is. (4)

11 The skin of trees. (4)

13 The thick part of a tree. (5)

14 Trees need this to make food. (8)

Down

1 These gather sunlight to make food for trees. (6)

2 Flowers just before they open. (4)

3 Trees soak this up through their roots. (5)

6 A colorful part of some trees that later makes seeds or fruit. (6)

8 The sticky liquid inside a tree. (3)

10 The leaves of a pine tree. (7)

11 The part of a tree where leaves are. (6)

12 The leaf of a flower. (5)

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Task Card 7

TRANSPIRATION

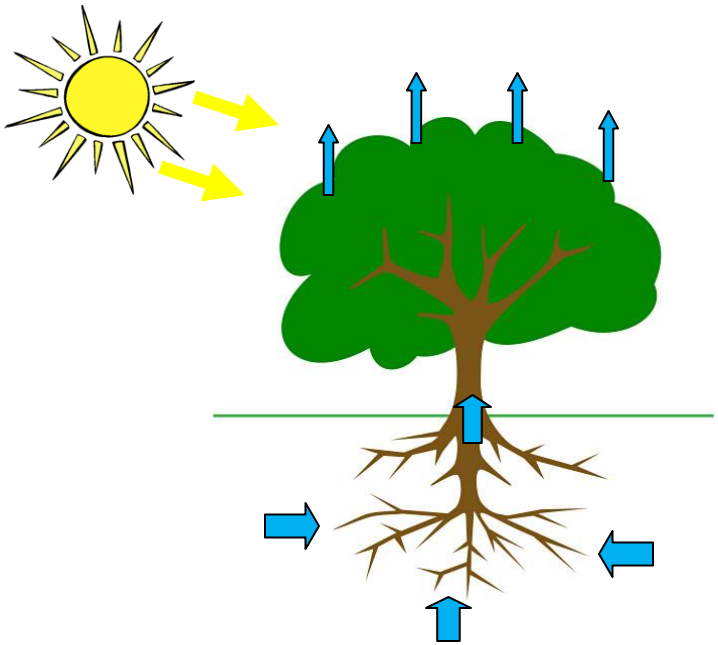
Transpiration is the evaporation of water from the leaves of trees and plants into the Earth's atmosphere.
Use the words from the word boxes to show the process of transpiration in the diagram.

absorbed	roots	water

branches	capillarity	leaves	travel
trunk	water		

atmosphere	evaporates	leaf	surface
vapour	water		

heats	leaves	radiation	sun



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Task Card 8

TRANSPIRATION RATES

Transpiration rates refer to the amount of water lost from leaves in a period of time. Measure how much water is lost from different plants and trees in your school yard.

What to do:

- Secure a clear plastic bag over the top of a plant taping the end of the bag to the stem.
- After 24 hours remove the bag and pour the collected water into a measuring cup.
- Complete the table below to show the differences in amounts.
- Consider the variables that might affect rate.
- Draw a map of where the plants/trees are in the school.

TREE / PLANT	TRANSPIRATION RATE amount of water in 24hrs	VARIABLES eg type of plant, wind, leaf size, air temperature, position in school , amount of sunlight
1		
2		
3		
4		
5		