

#### Welcome to the Blenheim Palace Tree Trail.

Your mission is to complete all the Tree Tasks on the trail and see how many you can get right.

Good luck and enjoy!

Start by standing on the grass under the large trees outside the Palace gift shop. Look up and check out their leaves.

- How many trees with green leaves can you see by the picnic tables?
- How many trees can you see with orange or copper coloured leaves?



Look at the trees you can see and then match them with the leaf pictures at the end of this quiz. What kinds of trees can you see?

#### TREE FACTS

- These trees are deciduous trees. Deciduous trees lose their leaves in winter and have leaves in many shapes and sizes.
- Evergreen trees keep their leaves in winter. Some evergreens have broad leaves like the Holly tree but many evergreen trees like conifers have needles instead of leaves.



# Tree Task 2

Keep walking until you can see the small island in the lake clearly. Look carefully at the trees on the island.

The trees on the island are all different shapes. Put a circle around the tree pictures below that match the ones you can see on the Island.



Lombardy Poplar

Leylandii





Larch



Leaves come in all different colours and tree trunks come in all shades of brown and grey.

What colours can you see on the island? Mark the colours you can see on the colour wheel.

#### TREE FACTS

Some of the trees on the island are conifers. These often look like what we know as Christmas trees. Instead of flowers, they have cones. They have needles, not leaves. Their needles stay on all winter.



### Tree Task 4

Walk on towards the Grand Bridge. If you look to the left of the bridge, there is a tree on the other side of the lake with a big hole in its trunk. It's called a Cedar of Lebanon.

Write down two reasons why you think this tree may have a hole in its trunk.

#### Tree Task 5

Walk over the Grand Bridge and look to your right. If it is dry, walk across the grass to the small grey stone plinth.

This plinth marks the spot where Woodstock Manor used to be. It was knocked down when the Palace was built. Near the plinth is a young Wellingtonia tree.

These trees grow very high and look a lot like giant Christmas trees.

Look carefully at the needles on this tree. Do they grow in any kind of pattern? Do a drawing in the box.



Once you've done your drawing, go back on to the path and keep walking until you see the tall oval shaped trees – the Poplars.

Look carefully at one of the Poplars. Write down three things that would help someone tell that a tree is a Poplar.

### Tree Task 7

Using the guide below, how old do you think the largest oak tree is?

#### How to work out a tree's age.

- How wide a tree's trunk is gives you a pretty good idea of how old the tree is.
- You can use the 'hug method' or a tape measure to measure the trunk
- The hug method When an adult holds out his/ her arms to hug someone or to hug a tree the measurement is roughly 1.5m (150cm), so get the adult with you to see how many hugs the tree is!
- Measure the trunk in centimetres then divide by 2.5.

#### TREE FACTS

Poplar trees make very good wind breaks so they are often planted around fields where fruit trees are grown. The flowers are called catkins and come out in March and April.

#### TREE FACTS

- Trees grow at different speeds, depending on how good the soil is, how much shelter they have and if they have lots of space around them.
- Like humans, trees grow faster when they're young and more slowly as they get older.
- Some trees like Christmas trees grow very fast and others like oak trees grow slowly.
- In an open space like Blenheim Park the trunk will grow by about 2.5cm a year.

Next take the right hand fork in the path and walk on towards Woodstock. The path rises above the cottage. The trees on your right are Beech trees.

K How have the Foresters protected these Beech trees?

Why do you think these trees have been protected?

# Tree Task 11

Walk on until you reach the iron fencing with water running underneath. Near here is an Alder tree.

What shape are an Alder tree's leaves? Can you draw a picture of one of these leaves in the box?

#### TREE FACTS

Alder trees like to grow near water.

They are a little bit dangerous. The wood that these trees produce is good for making gunpowder



Continue walking towards the Woodstock entrance. Can you spot some Sycamore trees? Their seeds are carried in pods which look like helicopter blades.

## Tree Task 12

As you walk away from the Woodstock entrance back towards the Palace you will pass a large Horse Chestnut on your left. These trees have compound leaves as shown in this picture.



- What shape is this Horse Chestnut tree? Is it tall and thin or round and wide?
- What kind of flowers does this tree have in spring?



Each Autumn, children collect the fruits of a Horse Chestnut tree and play with them. What is the name of this very well known fruit?

# Tree Task 13

Walk along the road until you reach the point where the wall of the Park turns sharp left. You will see two very large Cedar of Lebanon trees.

- Do you think these Cedar of Lebanon trees are very old?
- Find part of the tree where a branch has been cut off. What's another way you can tell how old a tree is without hugging it?









#### The following list made by the Woodland Trust can help you know if different types of tree are really old:

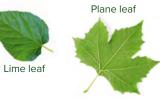
- Oak 3 adult hugs
- Birch a wrist hug
- Beech 2 adult hugs
- Hawthorn an elbow hug • Scots Pine - 1 adult hug • Cedar of Lebanon - two hugs

• Rowan - one adult hug

### Tree Task 14

As you walk back to the Palace entrance you will turn into the avenue of trees. These are Lime and Plane trees.

Use the pictures of leaves on this page to decide which trees are Lime trees and which are Plane trees



### Tree Task 15

Stand under a Lime tree and look up at the branches and leaves. Then stand beneath a Plane tree and look up.

Which tree lets through more light?

Why do you think that is? Clue: look at both sets of branches

and see how they have grown


### Tree Task 16

Trees can often be recognised by the bark on their trunks. Oak trees and Horse Chestnut trees have rough bark. Some tree trunks are smooth like the Beech tree.

How would you describe the bark on a Plane tree and how is it different from the bark on a Lime tree?





Plane







Lime



Poplar

Birch Western red Cedar

Oak

Sycamore

#### TREE FACTS

Alder

- A tree's trunk is very important. It gives the tree strength. A tree's trunk will generally grow wider as the tree grows taller, so that the tree has more support as it grows.
- Nutrients are passed up the new wood of a tree. If a tree's trunk is damaged or badly nibbled by rabbits or squirrels, the tree can die or grow more slowly than it was meant to.



#### \_\_\_\_\_\_ BLENHEIM PALACE

# Tree Trail

# Well done for completing the mission. Now find out how you did.

#### Check your answers below

#### Task 1

- There are five green leaved trees
- There is one copper leaved
- Beech trees

#### Task 4

 The hole may have been caused by a branch falling off and animals burrowing into the wood or by disease.

#### Task 6

Poplar trees are usually tall; have thin trunks, small grey green leaves.

#### Task 7

· The oldest Oak tree is approx 150 years old.

#### Task 8

- The beech trees have been protected with wire cages around their bases.
- The protection is to try and stop deer nibbling the young trees

#### Task 10

- The Horse Chestnut tree has a very large spread of branches and a thick trunk.
- The flowers have a candle like shape.
- Conkers

#### Task 11

- Yes -these Cedars of Lebanon are ancient.
- By counting the rings in the cross section of wood.