

Lesson One – The importance of trees

Promoting health and wellbeing through the outdoors

Skill Area	Activity	Outcome	Materials
Understanding the importance of trees for the environment  Thinking about how we use trees  Maths – tree calculator	Trees are important. Get the children to list as many reasons why this is true. What animals live in them? What do we use that is made of wood? How old do you think the oldest tree is?  What are the trees called in Dr. Seuss' 'The Lorax'?	To further understand the importance of trees  To help the children learn to appreciate how important trees are, so they respect them.	Worksheet  Pencils  100cm

Lesson 1 - Why are trees important

Trees are important for many reasons. They help us, and lots of other wildlife to survive.

List as many reasons as you can for why trees are important. What do we use them for?  
Which animals use them?

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Tree age calculator

You can guess the age of a tree without having to cut it down. The average tree grows 2.5cm a year.

To work out the age of a tree, you must measure the diameter of the tree. Then, once you have this number, divide it by 2.5.

For example, a tree with a 60cm diameter would be about 24 years old.

***In your pairs, find a tree and measure its diameter using the string and rulers provided.  
Divide the number by 2.5 to work out the age of the tree.***

Record the number here.....

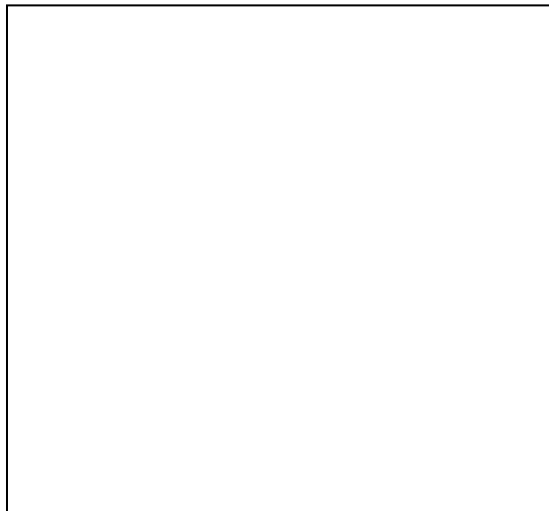
How old do you think the oldest living tree in the world is?

Lesson 2 – Identifying trees

<b>Skill Area</b>	<b>Activity</b>	<b>Outcome</b>	<b>Materials</b>
Tree identification Learning the names of British trees	In pairs, the children will each be designated three tree names. They will have to look up the tree name in one of the tree books provided. They then must find an example of a leaf from that tree, write the name down with a drawing of the leaf next to it	The children will have to use their identification skills to find their correct leaves.  They will hereby learn to identify types of trees by the shape of their leaves.	Worksheet  Pencils  Tree identification books

**Lesson 2 - Tree Identification**

Tree name.....



Tree name.....



Tree name.....



Lesson 3 – Understanding the importance of trees

Skill Area	Activity	Outcome	Materials/Equipment needed
Science – Understanding the importance of trees for oxygen	Collecting leaves and submerging them in water to watch the oxygen bubbles that form.	<p>To help gather an understanding that the trees are the lungs of the earth.</p> <p>To help the children recognise trees as living things.</p> <p>To visualise photosynthesis.</p>	<p>A bowl of water.</p> <p>Leaves.</p> <p>A small stone.</p> <p>A magnifying glass.</p>
KEY VOCABULARY	Trees, outdoor learning, nature, photosynthesis		

### Lesson 3 – why are trees important?

*Trees are the lungs of the earth. They store **carbon dioxide** and provide us with **oxygen** to breathe. We are going to test this today, to see it for ourselves.*

#### Step one

In groups of 3, we are going to go outside and collect a leaf from a tree or plant (it must be a living leaf from the plant for the experiment to work).

#### Step two

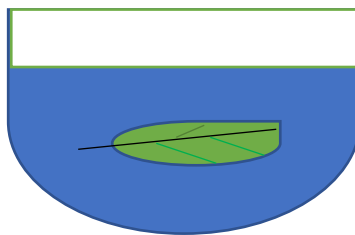
In our groups, we will each have a see-through bowl or beaker. We will fill this up with lukewarm water.

#### Step three

Collect a small stone from the garden. Place the stone on top of the leaf in the water (this is so it is fully submerged).

#### Step four

Put the bowl in a sunny spot. Leave the leaf in the bowls over lunchtime. Then have a look at it. You should see that small bubbles have formed on the leaf and around the top of the bowl. Have a look through the magnifying glass to get a better look.



What would happen if you held your breath underwater and then breathed out some of the air? This is what has happened to the leaves. The leaves are still using the sunlight as part of the **photosynthesis** process.

This process is what allows us to see the bubbles. The leaf releases its **oxygen** which form bubbles. This is because oxygen is lighter than water.

## Rationale

The three lesson plans I have designed are inspired by Dr. Seuss' "The Lorax" (1971). The Lorax is a story about the effects of pollution, climate change and deforestation. In the book, a forest of 'Trufufla trees' is chopped down and subsequently the homes of many animals (including the Lorax) are destroyed. The Lorax acts as the voice of the trees "for trees have no tongues". The Lorax leaves when his message is not heard, and the trees are destroyed to make room for a manufacturing business. Although the Lorax is a children's book, it has a very important and real message. It was written in 1971 but sadly its message is still relevant today, if not more so. This is why I have chosen to focus my lesson plans on the importance of trees. My aim is to get the children to think about why we should look after trees, and understand why they are so vital for the planet.

Deforestation is a very real issue, with statistics suggesting that the world's rainforests could be completely gone in a hundred years (Vidal, 2017). Therefore, I believe that it is important that children are made aware of this issue from a young age – it is their generation that will be mostly affected by this in the future. This is why I included a session that got the children to reflect on how we use trees. I wanted them to understand that it affects us, as well as all kinds of wildlife.

I like to think that these lessons will inspire children to cherish trees and grow up wanting to make a change. Following on from these lessons, I would like to have planned a tree planting session. The Woodland Trust offer free tree planting packs to schools. This is an effective way to get children involved in fighting deforestation as they get first-hand experience. The Woodland Trust has planted 47 million trees since 1971 (The Woodland Trust 2019). The average woodland coverage in the EU is 37%. The UK's is only 13% (The Woodland Trust 2019), so they are working towards improving this.

The lessons I have planned are interactive in order to get the children to engage with the topic. Dewey (1938) argues that children learn best through doing. He believed that human beings learn through a hands-on approach, learning from their surroundings by interacting with them. This is why I chose to include activities that involved going outside and becoming immersed in the surroundings. By collecting leaves in order to learn how to identify trees, the information is more likely to be retained.

## References

Dewey, J. (1938). *Experience and education*. New York: Macmillan

Seuss. (1971). *The Lorax* (1st ed.). New York: Random House.

The Woodland Trust. (2019). We Plant. Retrieved 11 May 2020, from <https://www.woodlandtrust.org.uk/about-us/what-we-do/we-plant-trees/>

Vidal, J. (2017). We are destroying rainforests so quickly they may be gone in 100 years. *The Guardian*. Retrieved from <https://www.theguardian.com/global-development-professionals-network/2017/jan/23/destroying-rainforests-quickly-gone-100-years-deforestation>