

## **Trees are Important!!!**

Trees are an important part of our daily lives. They absorb carbon dioxide (a greenhouse gas) and give us oxygen to breathe. Trees make our environment beautiful with their different colours, flowers and shapes and they provide us with shade and relief from the sun's heat and harmful rays. Trees help absorb the rain and help stabilize the weather. Trees are very important to us! Let us take a closer look at parts of the tree.

### **What are the Parts of a Tree?**

#### **Seed**

Like many plants, a tree begins from a seed. Inside each tree seed is a tree waiting to be born! A seed must have food, water and sunlight to grow. Once the seed sprouts, it grows into a seedling that grows into a sapling and eventually saplings grow into trees that produce their own seeds.

#### **Roots**

All trees have roots, which extend into the soil and have two important jobs to do: they anchor the tree to the ground so that it can stand upright, and they absorb water, minerals and nutrients from the soil.

#### **Trunk**

The trunk of a tree supports the branches and transports water and minerals from the soil to the rest of the tree. The trunk supports the tree as it grows taller in order to reach the sunlight it needs to continue growing. The trunk is covered with a tough outer covering of bark that protects the tree. The layer under the bark is called sapwood and the centre of the trunk is called heartwood. Heartwood is formed as the tree grows and the inner layers of sapwood die and harden. The hardness of heartwood helps support the tree. In order to find out the age of a tree, count the tree layers or rings on the trunk of a dead tree. The rings are thicker or thinner depending on the temperature and weather that year, as well as other environmental conditions.

#### **Branches, Leaves and Twigs**

Branches grow out from the trunk and have twigs at the tips. These twigs are the growing ends of the trees. They also transport water and minerals from the trunk to the leaves and needles.

#### **Leaves and Needles**

Leaves and needles are arranged on the twigs to capture maximum sunlight. Using sunlight the leaves and needles produce food for the whole tree. Leaves use energy from the sun to take the carbon dioxide in the air and use the water from the soil to convert into sugars to feed the tree. This process is known as photosynthesis. As a by-product, trees release oxygen into the air. This is very important, as all animals and humans need oxygen to survive.