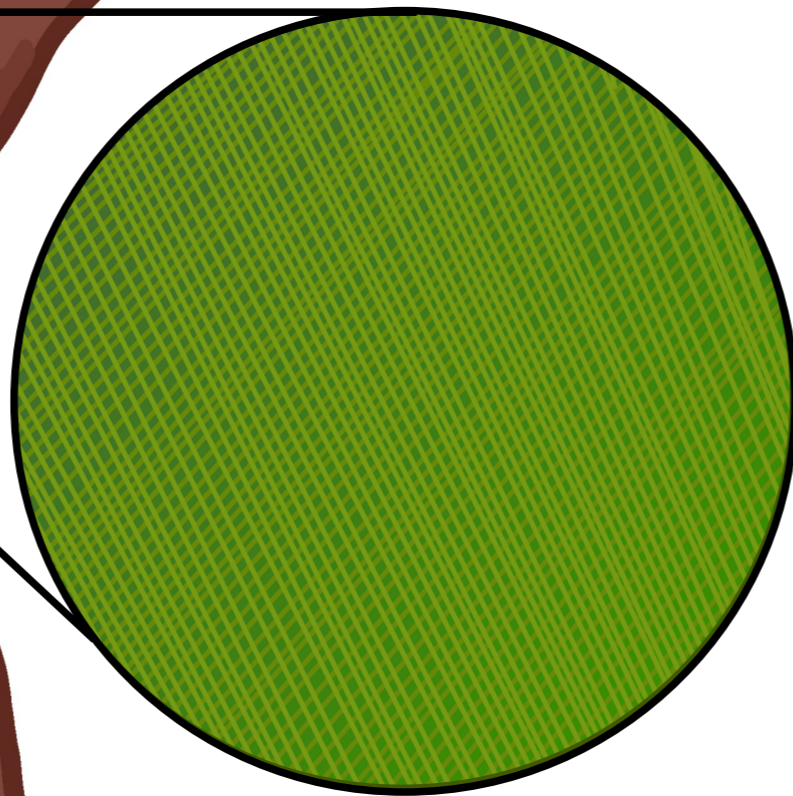
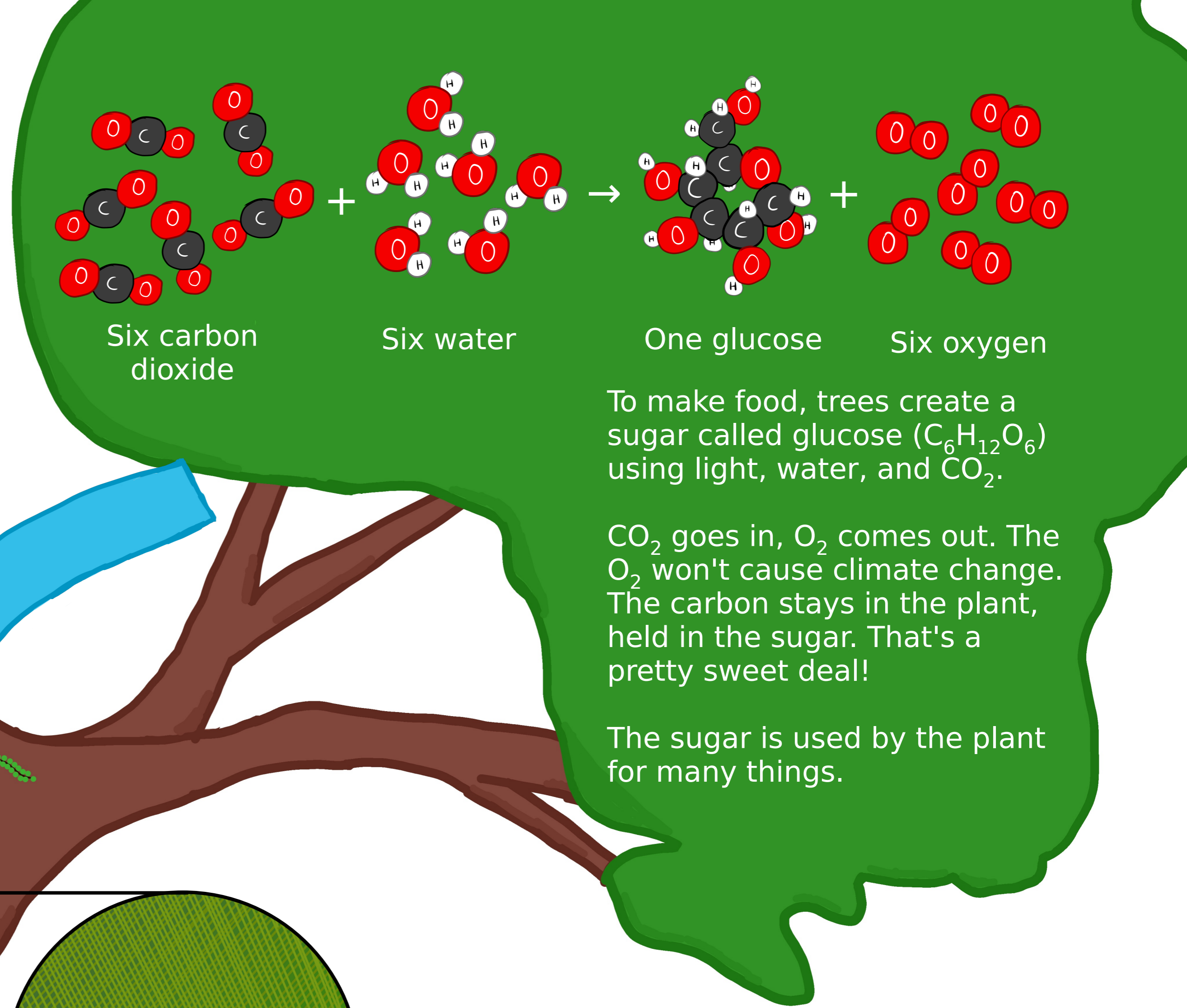


How do trees fight climate change?

Our goal is to take carbon dioxide (CO₂) out of the air, and hold it somewhere for a long time.

Some of the sugar is joined together into chains to turn it into cellulose. Cellulose is what makes plants so tough. In the plant's cell walls, long chains of cellulose are laid alongside each other create a many layered net.

About 4/5 of the tree is made of cellulose. As the tree grows, more carbon is held in the cellulose.



Cellulose net in the cell wall

As dead plants rot, the carbon they held is returned to the air, unless the carbon is deep enough underground that it is trapped.

To fight climate change, we should plant trees, and leave them to grow for a very, very long time.

Around 1/5 of the sugar made by the plant is shared with fungi that live in its roots. The fungi eat the sugar, and the fungi share important chemicals in return. Now the carbon that was in the sugar, is held underground. Nice job, tree!

Even after the tree is fully grown, it will keep putting sugar underground to feed its fungi, and help other plants.

Carbon held underground in fungi, insects, and dead plant stuff will take a long time to return to the air. The carbon also makes the soil better while it is held there. The better the soil, the more carbon it can hold.

The total amount of carbon held underground is more than all the carbon held in living plants and in the air put together.