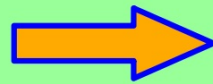


5/18 Trophic Levels #7

Agenda



Exit Goal

Where did all the material (matter) come from to make this tree from this tiny seed?



Learning

target: I can explain how a tree can grow from a seed.

Where did all the **material** (matter) come from to make this tree?



Learning target:

I can explain where the mass in a tree comes from and where organisms get energy.

Where did all the material come from to make this tree?

The surprising answer is, tree stuff comes mostly from the air!

Dry wood is about 93% made from chemicals in the air and about 7% made from water (the hydrogen in the water, to be precise). The soil provides almost nothing by weight to the tree, just trace elements that make up much less than 1% by weight.



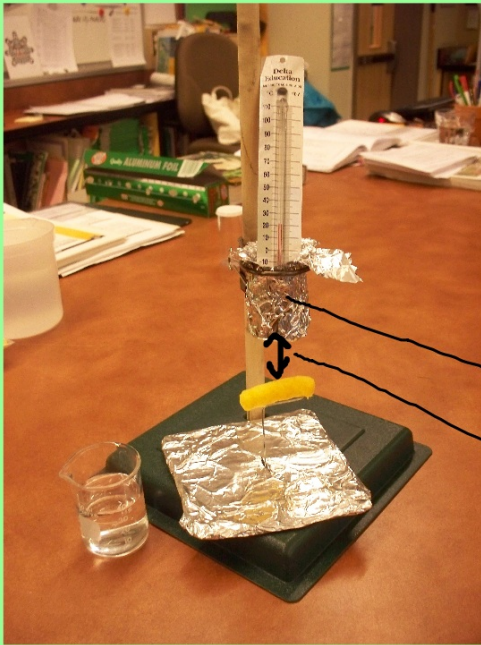
**Learning
target:**

I can explain where the mass in a tree comes from and where organisms get energy.

How does your body get energy to do the things you want to do?



Learning target: I can explain what happens to the energy from the sun once it has been converted into food energy in the glucose.



<i>volume water</i>	<i>20ml</i>
<i>Final temp</i>	
<i>starting temp</i>	
<i>temp change</i>	

20ml.

2cm

One calorie is the amount of heat needed to raise the temperature of 1ml water 1 °C.



Learning target: can explain what happens to the energy from the sun once it has been converted into food energy in the glucose.