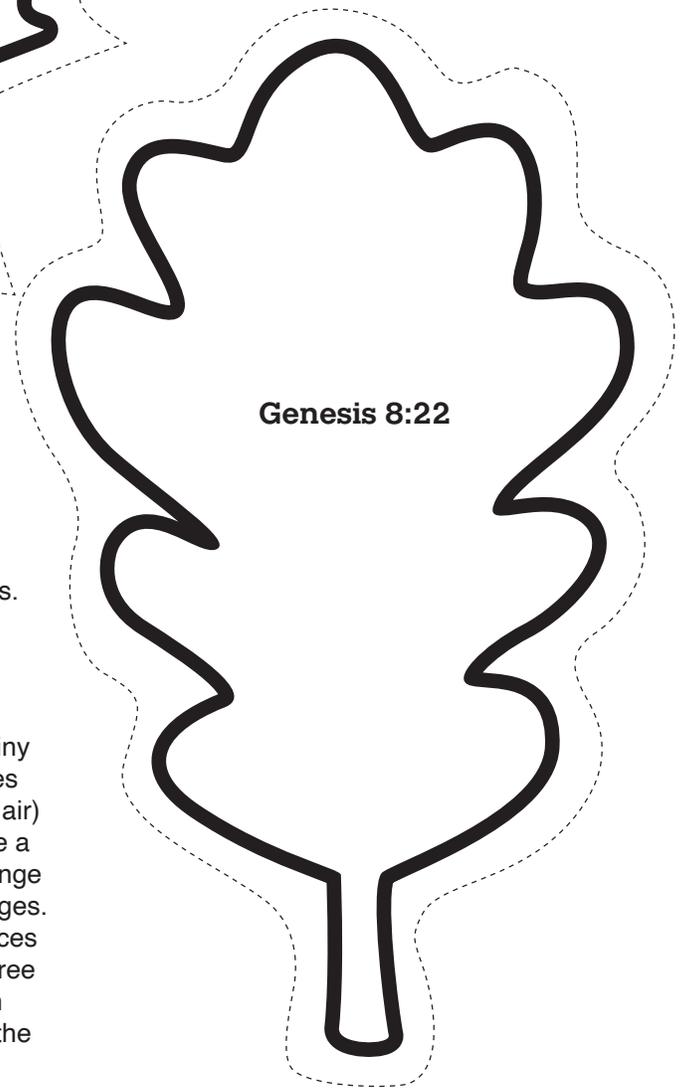# Design a Leaf

Color your own fall leaf. Cut it out and share it with someone special.

Add your own scripture. You can also color the backside once you cut it out.

*You can instead cut around the black line if you don't want the white border.

Genesis 8:22

How do the leaves get their colors?

In the fall when leaves start to change color it's because of the chemicals in them called pigments . There are four different kinds.

Chlorophyll (greens)   **Xanthophylls (yellows)**

Carotenoids (oranges)   **Anthocyanins (reds)**

In spring and summer the sunlight triggers the Chlorophyll (like tiny factories) to absorb sunlight–through photosynthesis the leaf uses that stored energy to convert carbon dioxide (absorbed from the air) and water into glucose, a type of sugar (food for the tree). So like a tiny factory that creates food for the tree the factory starts to change as the weather gets cooler and the amount of sunlight also changes. The factories start to break down and change into other substances and get ready to close for the winter. The food get stored in the tree and what is left in the leaf gives us different colors. The tree then creates a special layer of cells creating a barrier between it and the leaf. Eventually the wind blows and the leaf falls to the ground.

It's amazing to think of all the processes that are hidden from our sight that the Awesome Creator put into place for every living thing! He cares about the little things. Making sure we have seasons and that the tree gets enough food it needs and also then it helps us by making oxygen for us to breathe! God is so good!
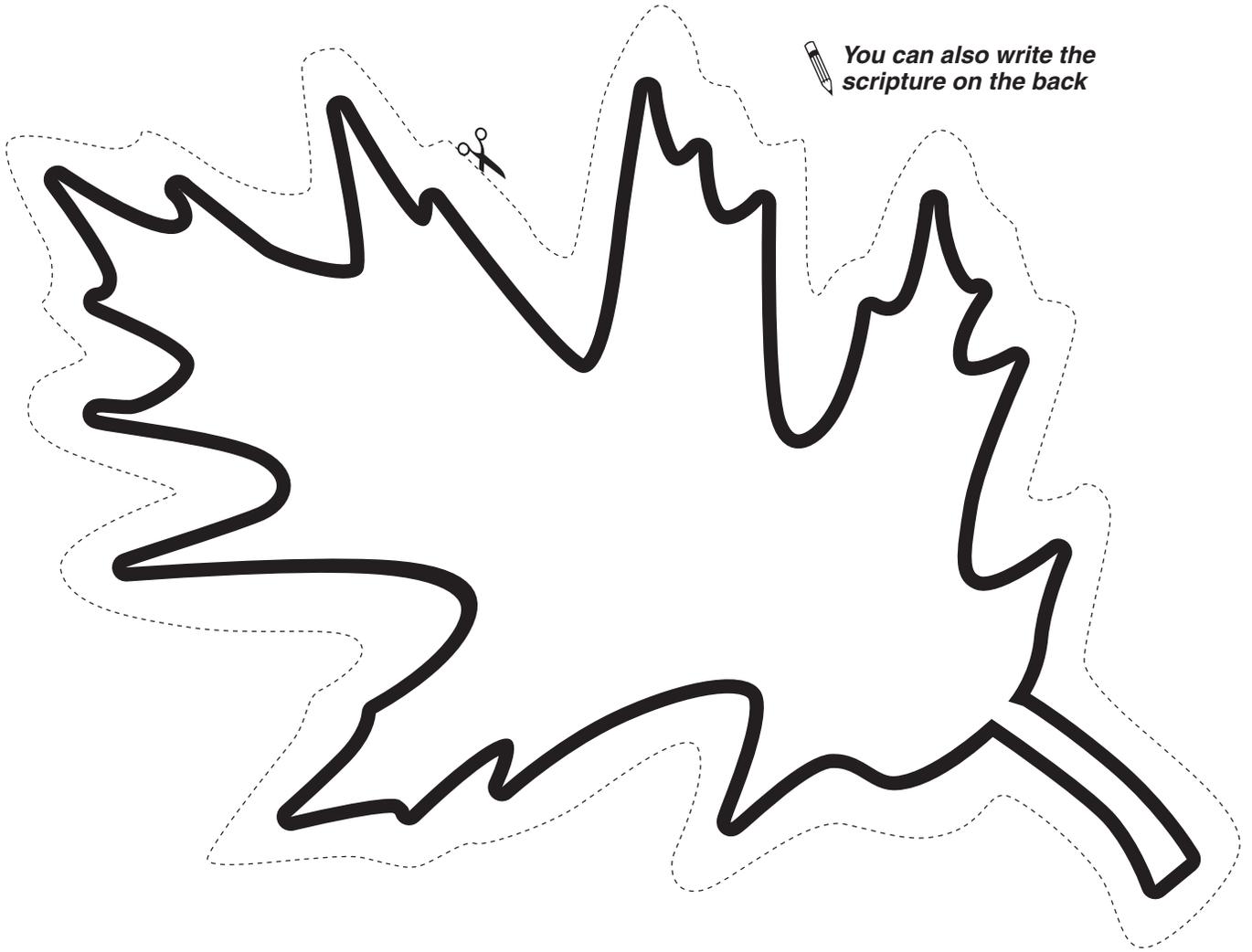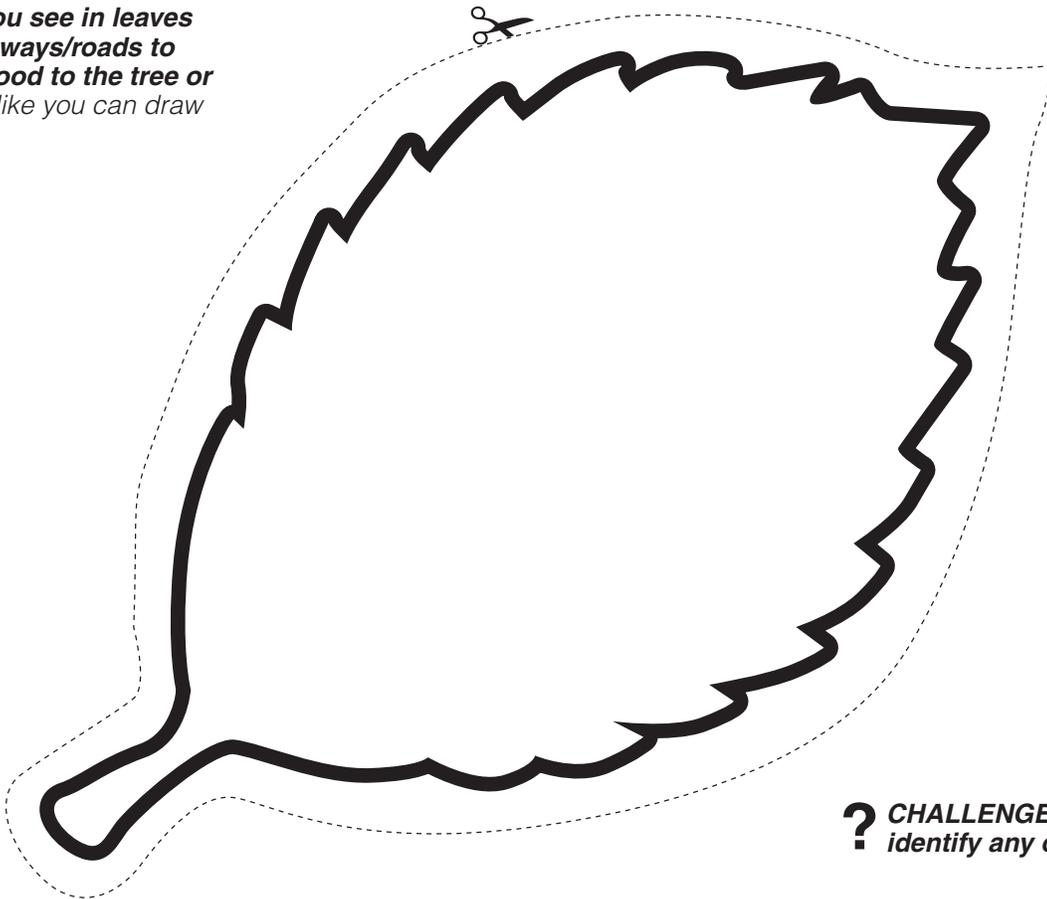
Bible Lesson

"While the earth remains, Seedtime and harvest, Cold and heat, Winter and summer, And day and night Shall not cease."
– Genesis 8:22

The veins you see in leaves act like highways/roads to deliver the food to the tree or plant. *If you like you can draw them in.*

? *CHALLENGE: Can you identify any of these leaves?*