

Supplies

- ONE PIECE OF PAPER
- ONE GREEN CRAYON
- ORANGE, YELLOW, OR RED MARKER
- SCISSORS
- FORK OR WOODEN SKEWER FOR SCRATCHING

Directions

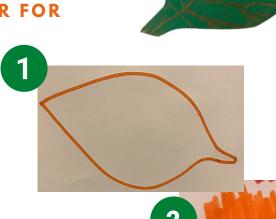
 DRAW A LEAF SHAPE ON A PIECE OF PAPER WITH ONE OF YOUR MARKERS

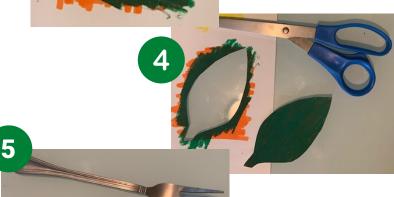
 TOTALLY COLOR THE INSIDE OF THE LEAF WITH YOUR MARKER

 NOW DRAW WITH GREEN CRAYON OVER THE WHOLE INSIDE OF YOUR LEAF

• USE YOUR SCISSORS TO CUT OUT THE LEAF

 USE THE POINTS OF A FORK OR THE TIP OF A WOODEN SKEWER TO DRAW A DESIGN IN THE GREEN CRAYON







Observations

HAVE YOU EVER NOTICED THAT SOME LEAVES CHANGE COLOR IN THE FALL?

WHAT OTHER THINGS DO YOU NOTICE HAPPENING DURING THIS TIME? IS THE WEATHER CHANGING? ARE ANIMALS DOING DIFFERENT THINGS? ARE THE DAYS GETTING LONGER OR SHORTER?

TAKE A WALK OUTSIDE. DO YOU NOTICE ANY LEAVES CHANGING COLOR NOW?

The Science

DURING THE WINTER, MANY TREES GO DORMANT-A SORT OF HIBERNATION FOR PLANTS. AS THE DAYS GET SHORTER AND THE WEATHER GETS COLDER, TREES SHUT DOWN MANY OF THEIR OPERATIONS FOR A FEW MONTHS.

LEAVES CONTAIN DIFFERENT COLOR CHEMICALS-CALLED PIGMENTS. THE GREEN PIGMENT, CALLED CHLOROPHYLL, IS FOUND IN THE PARTS OF THE LEAVES THAT PRODUCE SUGARS FOR THE TREES. SINCE THE TREES GO DORMANT IN THE WINTER AND DON'T NEED TO PRODUCE ANY SUGAR, THE SUGAR FACTORIES IN THE LEAVES SHUT DOWN. THIS MEANS LESS GREEN PIGMENT.

THE OTHER COLORS WE SEE IN FALL LEAVES-THE YELLOWS, ORANGES, AND REDS-ARE ALWAYS THERE. THERE IS JUST USUALLY MORE GREEN PIGMENT SO WE DON'T NOTICE THEM. BUT WHEN THE LEAVES LOSE THEIR GREENS, THE OTHER COLORS SHINE THROUGH!