



“Fruit trees of all kinds will grow on both banks of the river. Their leaves will not wither, nor will their fruit fail. Every month they will bear, because the water from the sanctuary flows to them. Their fruit will serve for food and their leaves for healing.”

Ezekiel 47:12



Whoever trusts in his riches will fall, but the righteous will thrive like a green leaf.

Proverbs 11:28

# FASCINATING FACTS

about

# LEAVES

Lesson 6



Handwriting practice lines consisting of solid top and bottom lines with a dashed middle line. There are five sets of these lines.

Handwriting practice lines consisting of solid top and bottom lines with a dashed middle line. There are five sets of these lines.





# TESTING TRANSPIRATION

## Lesson 6

What I did:

What I learned:

# Scientific Speculation Sheet



## Testing Transpiration

### Lesson 6



**Name** \_\_\_\_\_ **Date** \_\_\_\_\_

**Materials Used:**

**Procedure:**

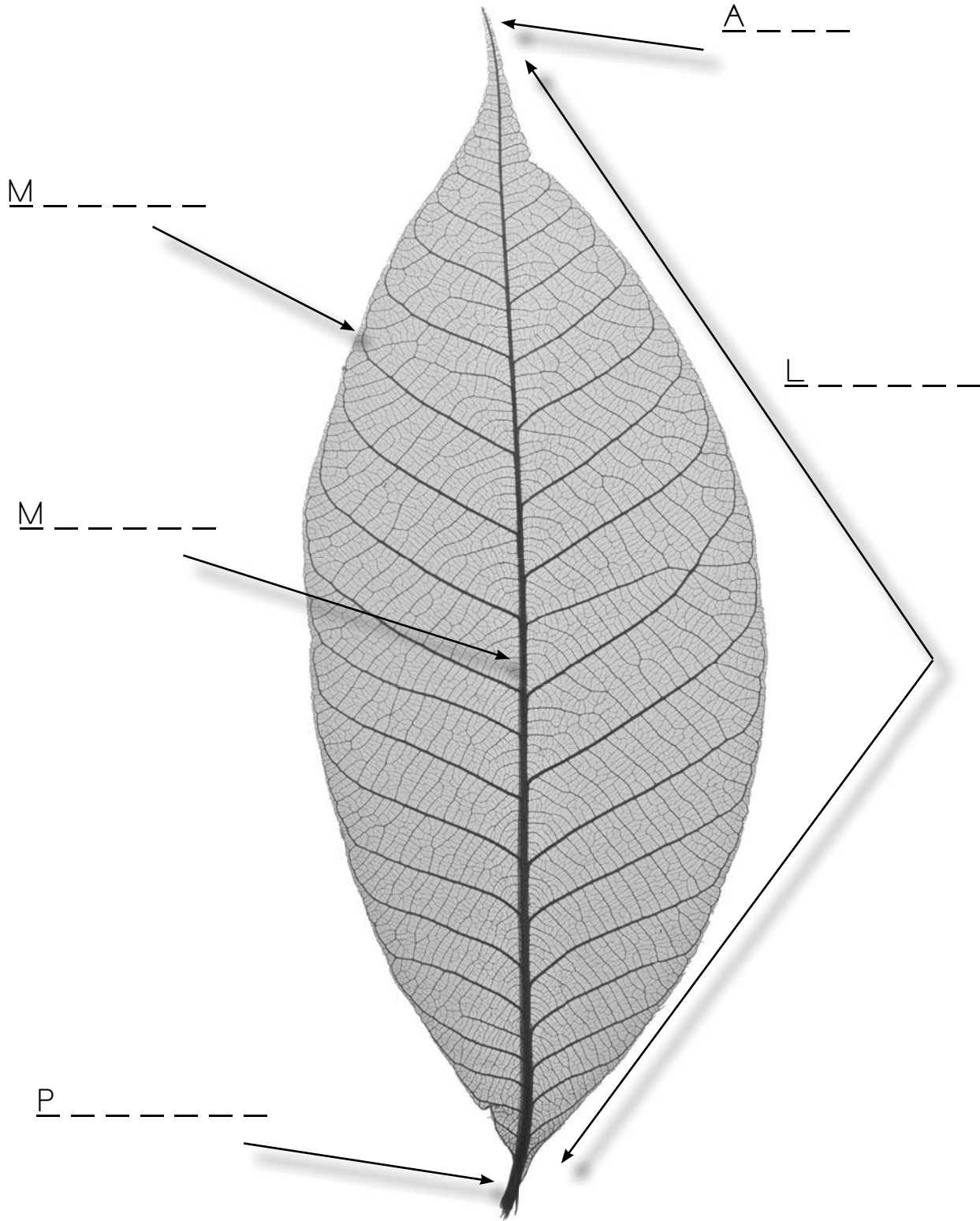
**Hypothesis:**

**Results:**

**Conclusion:**

# LEAF ANATOMY

## Lesson 6



Apex

Midrib

Margin

Petiole

Lamina

Lesson 6

SIMPLE LEAF



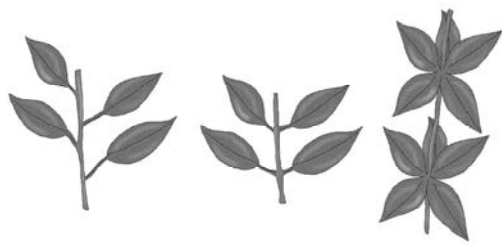
COMPOUND LEAF





# LEAF CLASSIFICATION CHART

## LEAF ARRANGEMENT



Alternate

Opposite

Whorled

## LEAF VENATION



Parallel



Pinnate



Palmate

## LEAF MARGIN



Entire



Serrate



Dentate



Crenate



Undulate

## LEAF SHAPES



Linear



Lanceolate



Oblanceolate



Elliptical



Oblong



Oval



Ovate



Obovate



Spatulate



Deltoid



Cordate



Reniform



Cuneate



Orbicular



Lobed



Cleft



Needle-like



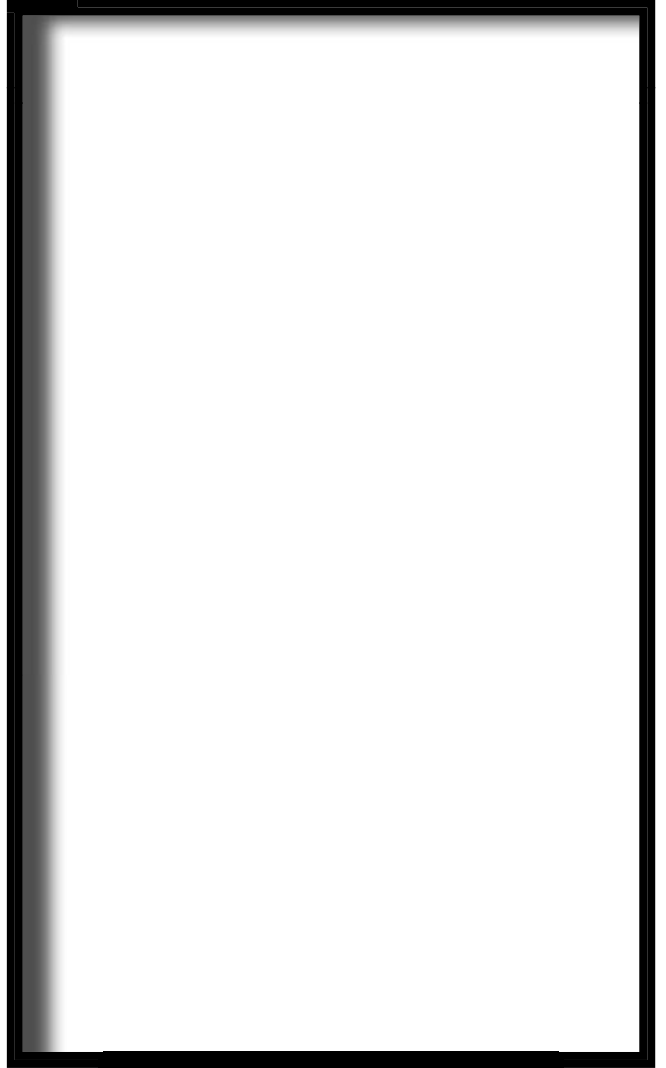
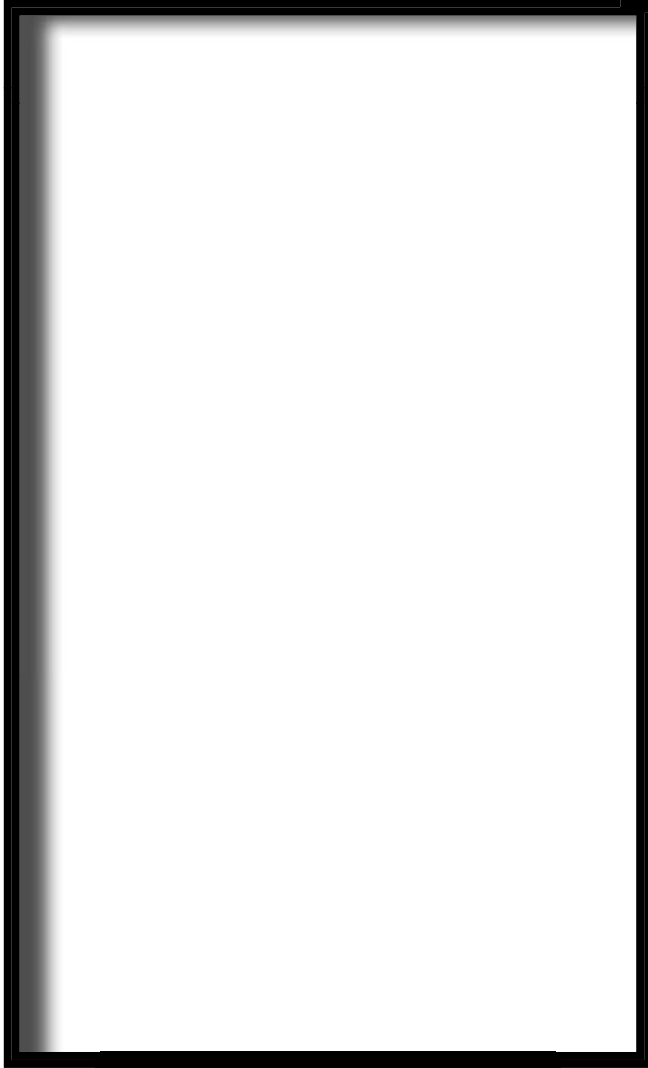
Awl-like



Scale-like



Lesson 6



 ARRANGEMENT

 ENATION

 HAPE

 ARGIN

 ARRANGEMENT

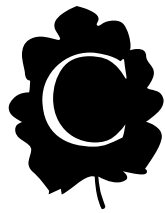
 ENATION

 HAPE

 ARGIN



*LEAF*



*CLASSIFICATION*

Lesson 6



*A*RRANGEMENT

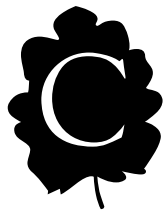
*V*ENATION

*S*HAPE

*M*ARGIN

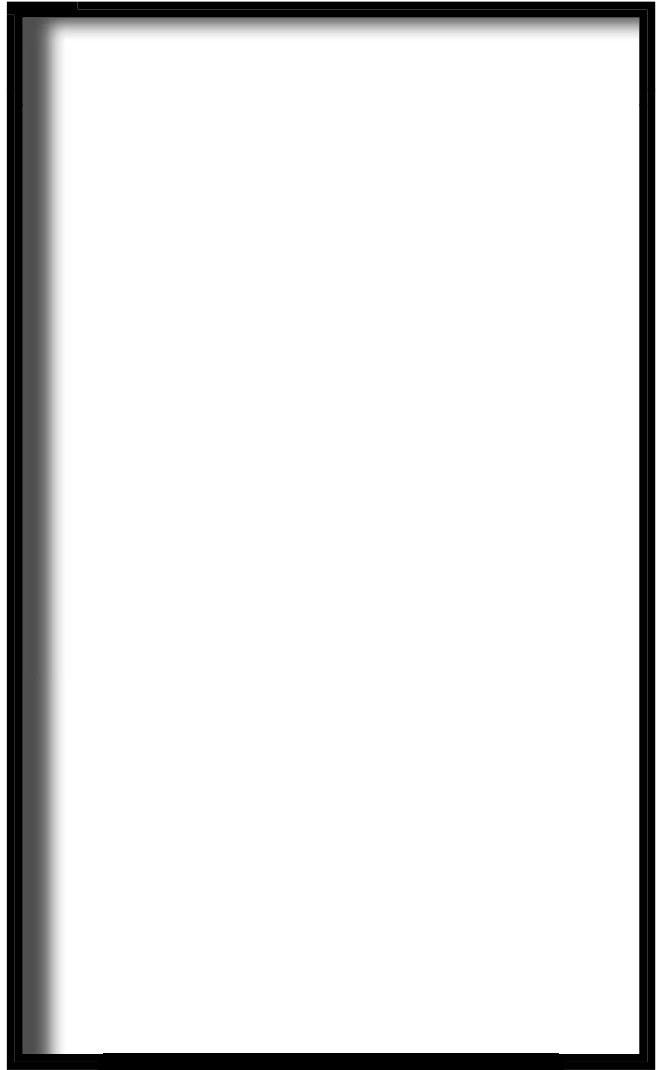
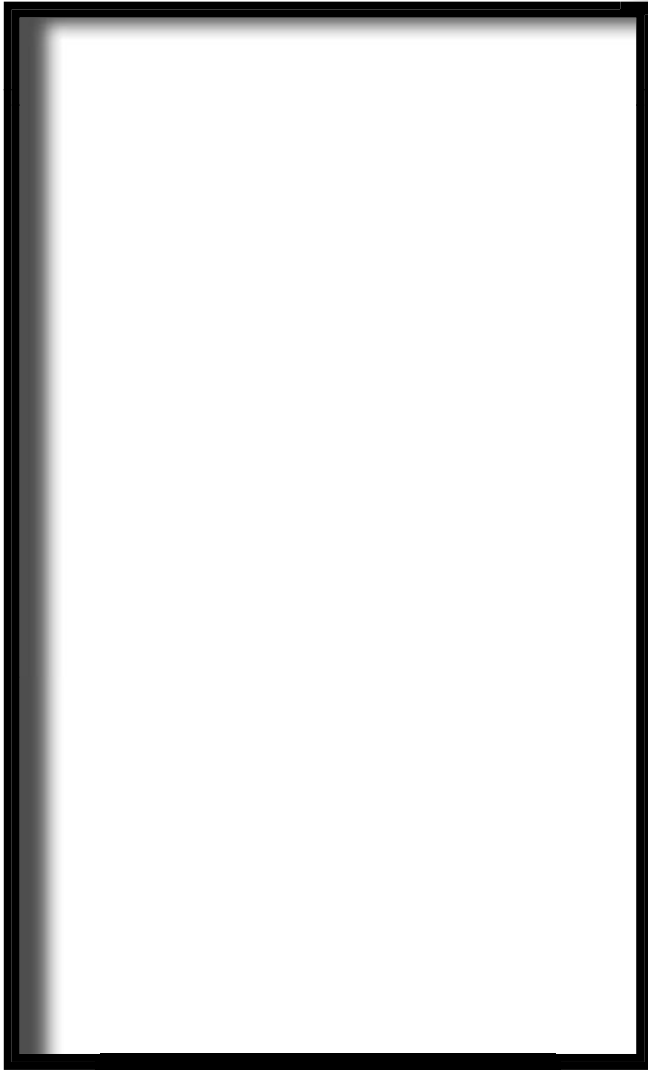


*LEAF*



*CLASSIFICATION*

Lesson 6



 *ARRANGEMENT*

 *VENATION*

 *SHAPE*

 *MARGIN*

 *ARRANGEMENT*

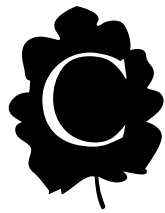
 *VENATION*

 *SHAPE*

 *MARGIN*



*LEAF*



*CLASSIFICATION*

Lesson 6



*A*RRANGEMENT

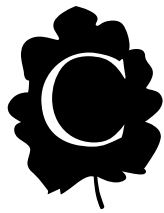
*V*ENATION

*S*HAPE

*M*ARGIN

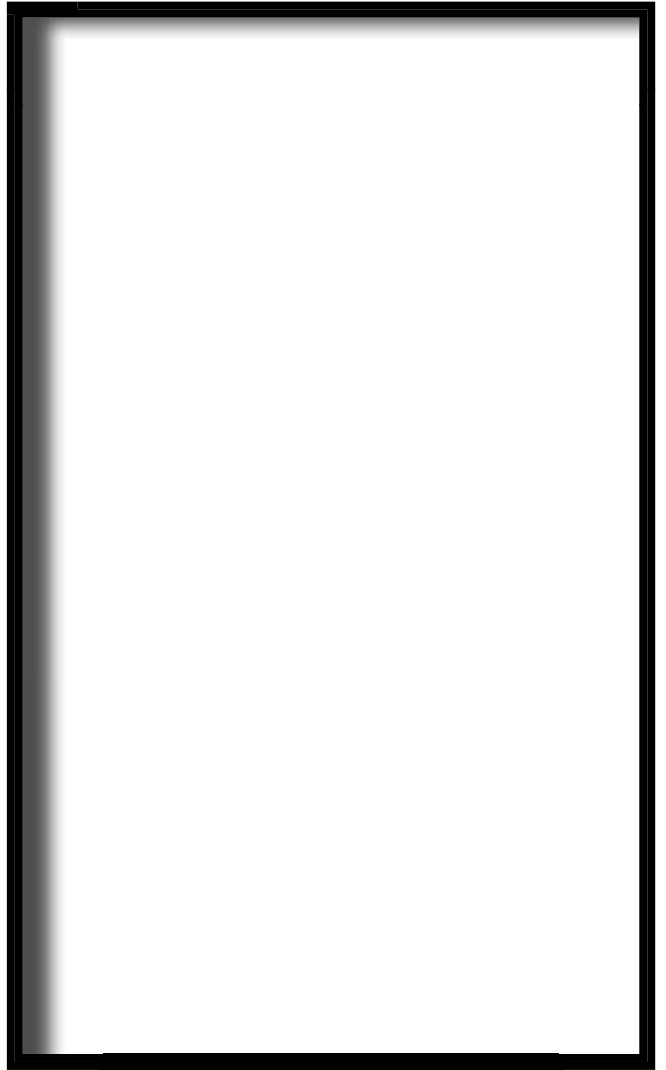
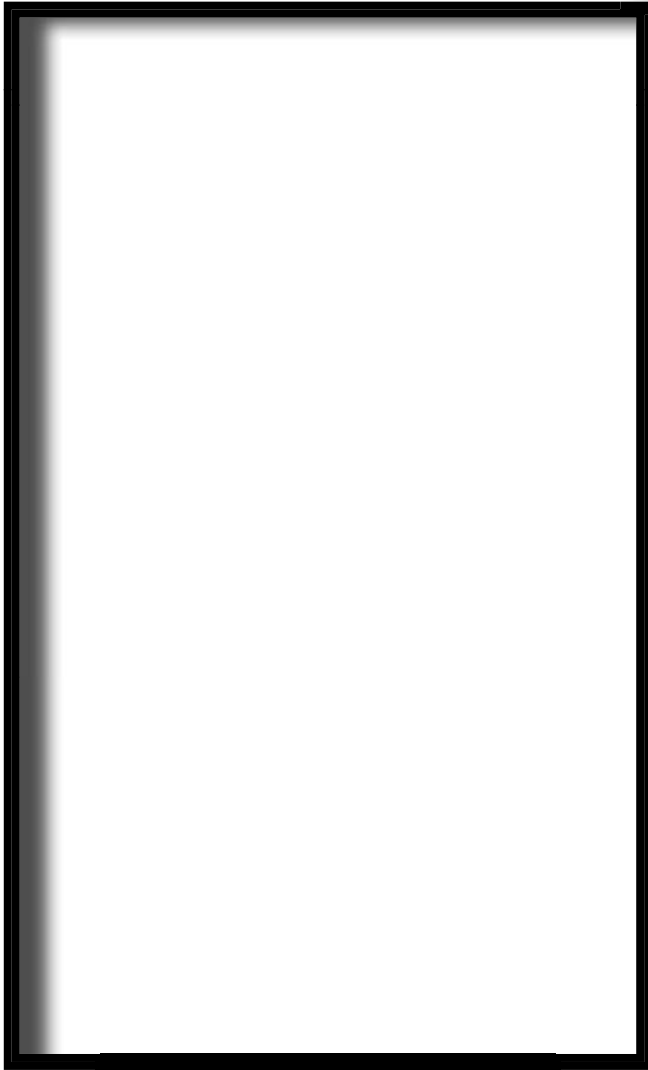


*LEAF*



*CLASSIFICATION*

Lesson 6



 *ARRANGEMENT*

 *VENATION*

 *SHAPE*

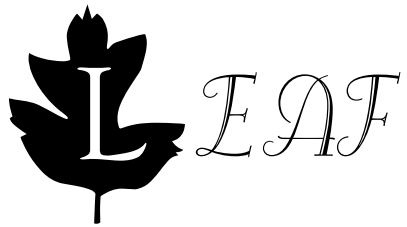
 *MARGIN*

 *ARRANGEMENT*

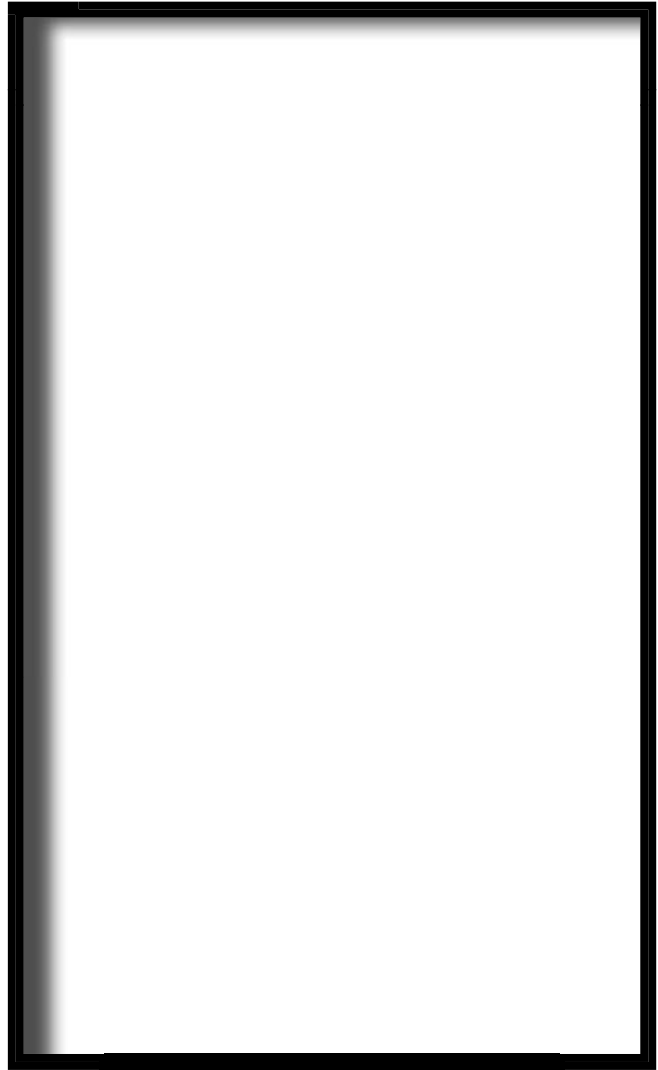
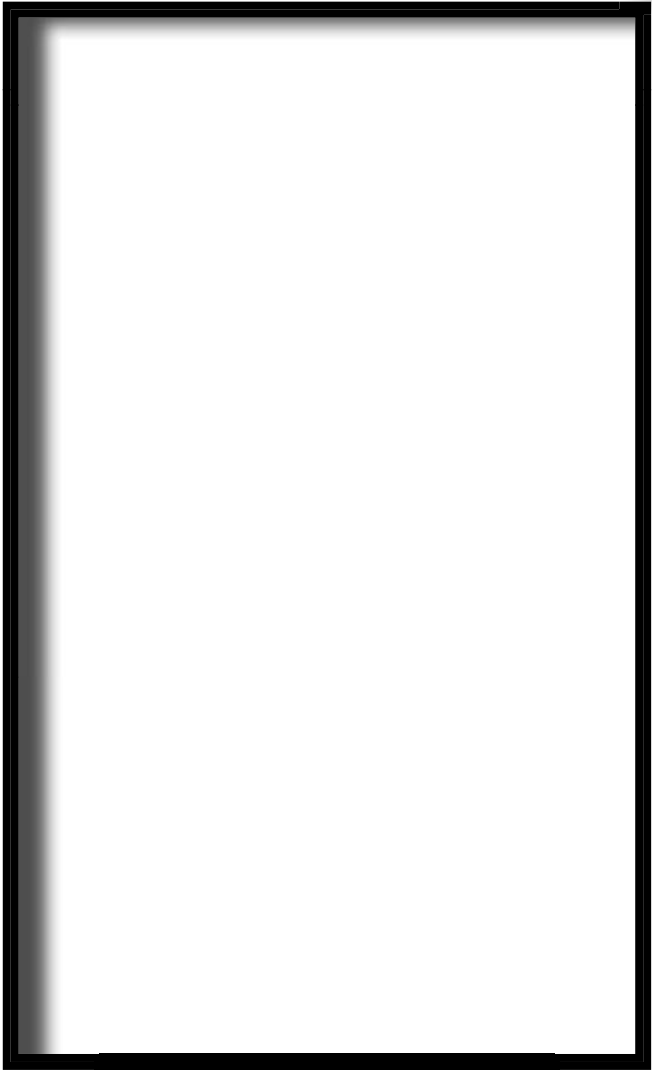
 *VENATION*

 *SHAPE*

 *MARGIN*



Lesson 6



 *ARRANGEMENT*

 *ENATION*

 *HAPE*

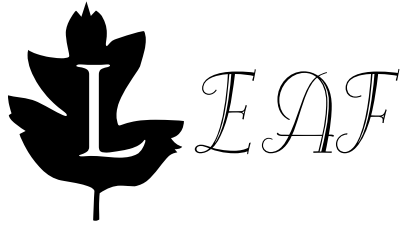
 *ARGIN*

 *ARRANGEMENT*

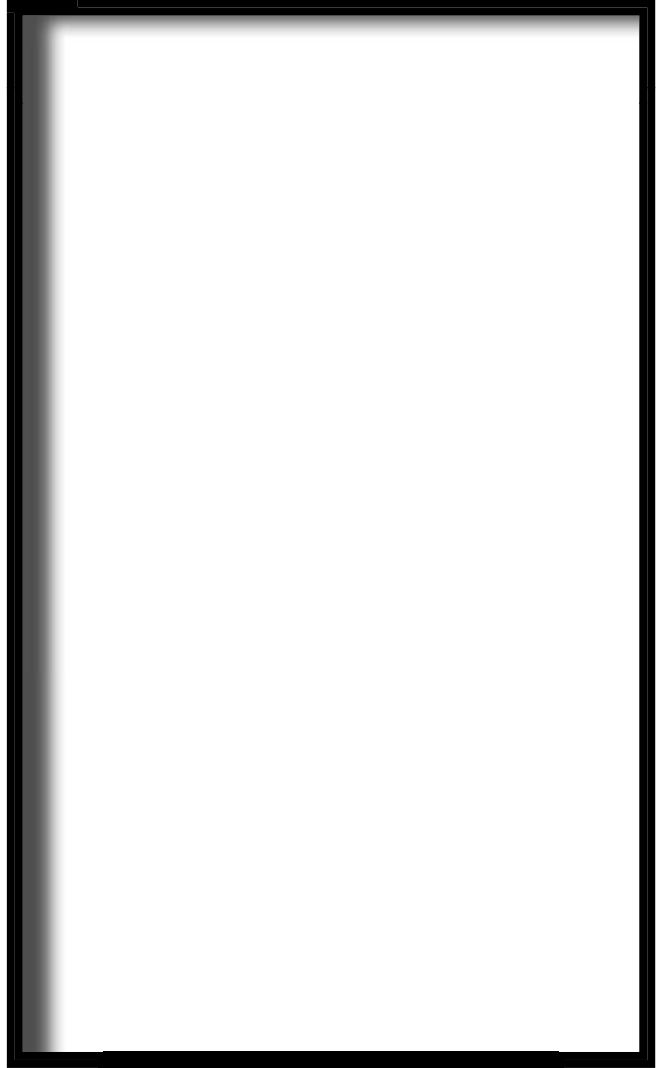
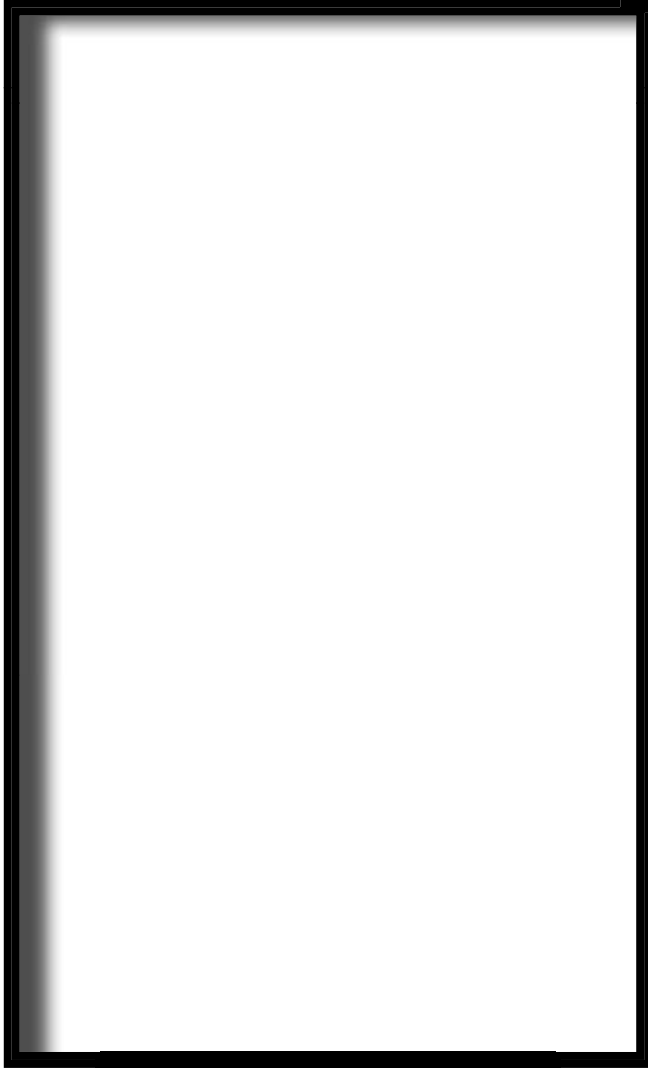
 *ENATION*

 *HAPE*

 *ARGIN*



Lesson 6



 *ARRANGEMENT*

 *VENATION*

 *SHAPE*

 *MARGIN*

 *ARRANGEMENT*

 *VENATION*

 *SHAPE*

 *MARGIN*



# MY LEAVES PROJECT

## Lesson 6

What I did:

What I learned:



# LIFE OF A LEAF STORY

## Lesson 6

Handwriting practice area consisting of 10 sets of horizontal lines. Each set includes a solid top line, a dashed middle line, and a solid bottom line.

# COPYWORK

He who trusts in his riches will fall,  
But the righteous will flourish like  
the green leaf.

Proverbs 11:28

Handwriting practice lines consisting of solid top and bottom lines with a dashed midline for letter height guidance.

# COPYWORK

He who trusts in his riches will  
fall, But the righteous will flourish  
like the green leaf.

Proverbs 11:28

Handwriting practice lines consisting of solid top and bottom lines with a dashed midline, repeated five times.



# VOYABULARY LIFT THE FLAP

## LESSON 6

Tear out this page. Cut out each word and match it to the correct definition on the following page. Then, place glue along the top edge of the back of each word and glue above the line on each definition. Once the glue is dry, fold back the word to reveal the definition.

PHOTOSYNTHESIS

PETIOLE

LAMINA

MARGIN

STOMATA

APEX

CHLOROPHYLL

CARBON  
DIOXIDE



# LEAVES LIFT THE FLAP

## LESSON 6

Glue correct word above this line, then fold back.

The process plants use to make food for themselves.

Glue correct word above this line, then fold back.

Tiny mouths on the bottom side of a leaf.

Glue correct word above this line, then fold back.

The invisible gas plants need from the air to make food.

Glue correct word above this line, then fold back.

The green pigment found in all green plants which helps them produce food.

Glue correct word above this line, then fold back.

The place where a leaf connects to the tree or the stem of the plant.

Glue correct word above this line, then fold back.

The tip of the leaf.

Glue correct word above this line, then fold back.

The entire leaf blade.

Glue correct word above this line, then fold back.

The outside edge of the leaf.

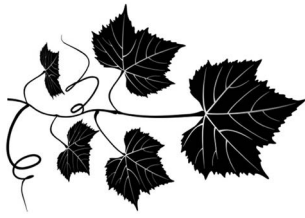


# LEAVES MINIBOOK

## Lesson 6

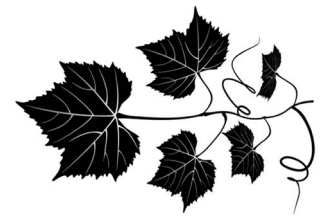
Paste your Leaf Fan onto  
this page.





# Dig in Deeper

## Lesson 6



### **Make a Leaf Chromatograph**

#### **You will need:**

A coffee filter, leaves, a quarter, rubbing alcohol, a small glass jar, a pencil, tape, foil

Leaves have a green pigment called chlorophyll that they use to capture sunlight. But did you know that leaves also have pigments of other colors that enable them to capture colors of light that chlorophyll misses? There are also yellow and orange pigments called carotenoids, pigments called anthocyanins that can be many colors, and brown pigments called tanins. See if you can find a hint of these colors by doing a leaf chromatography experiment. The instructions are below.

First, cut a one inch strip from a coffee filter. Make one end pointed. Put a leaf on the coffee filter strip about 1/4 inch above the point. Firmly roll the edge of the quarter over the leaf, pressing green leaf juice into the strip. Allow the green leaf juice to dry. Repeat this process again with several more leaves to ensure that a lot of green pigment is on the coffee filter strip.

Now, pour 1/2 inch of rubbing alcohol into the bottom of the jar. Tape your coffee filter strip to the middle of the pencil and hang it so that the very tip of the strip touches the alcohol. Make sure the part that has leaf juice on it is above the alcohol, not touching it. Next, secure foil over the top of the jar to keep the alcohol from evaporating.

Watch the alcohol move up the coffee filter. What happens? In about 10-15 minutes, you will notice the colors from the leaf juice beginning to separate. Pull the filter up before the alcohol reaches the top. You have made a chromatograph!

### **Add Some Spice to Leaf Hunting**

Leaf hunting can be a fun activity. You can add a little more excitement to leaf hunting by making a scavenger hunt list of the different kinds of leaves you might find. Set a time limit and have a race to see who can find the most leaves!

#### **Leaf Collecting**

For some more fun, go out and collect a variety of leaves. Have your parent find some different kinds of leaves and show them to you. Go on a hunt and see how long it takes you to find those particular leaves.

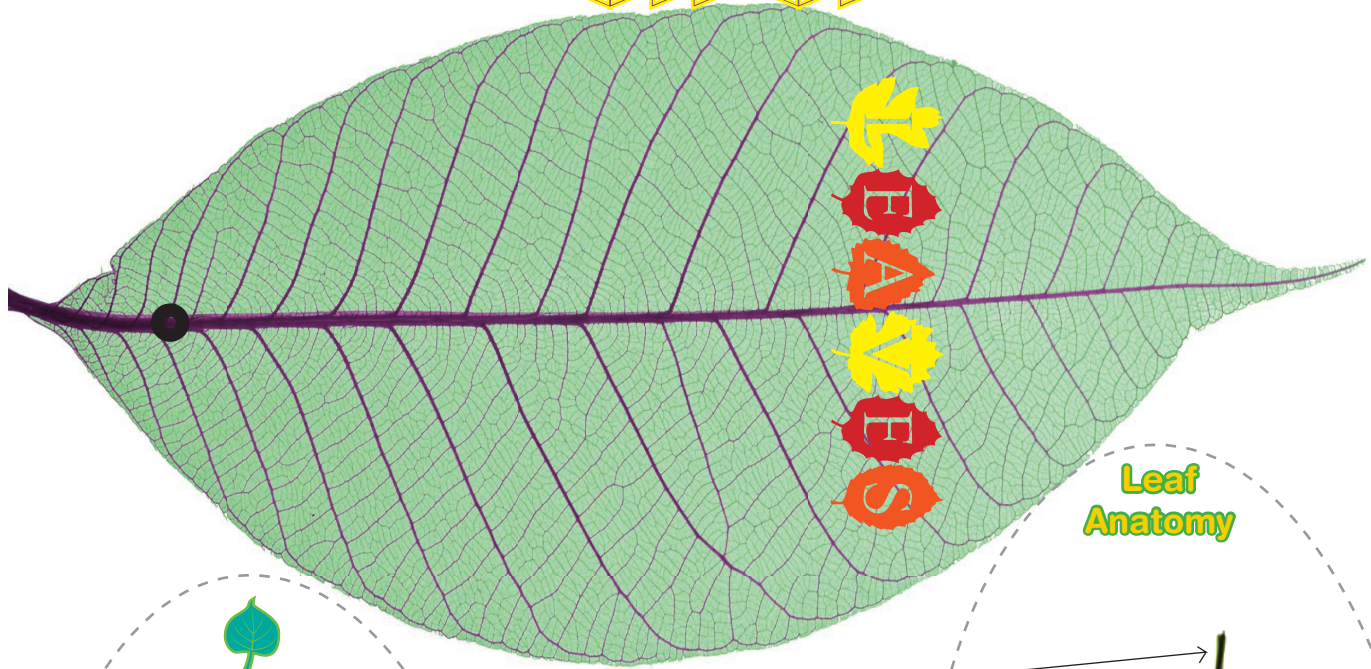
#### **Make Leaf Creatures**

In the fall, leaves are abundant. It is fun to collect different shapes, sizes, and colors. You can assemble the leaves into people, animals, or make-believe creatures. One leaf could be the head, and another type could be the legs or tail. See how many different things you can create from the leaves.

#### **Leaf Imprints**

It is fun to make crayon imprints using dried leaves. Place the leaves under a piece of paper (rice paper is ideal, but not necessary). Peel the paper off a crayon and, using the side of the crayon, color over the leaf.

# LEAF FAN



**Photosynthesis is**

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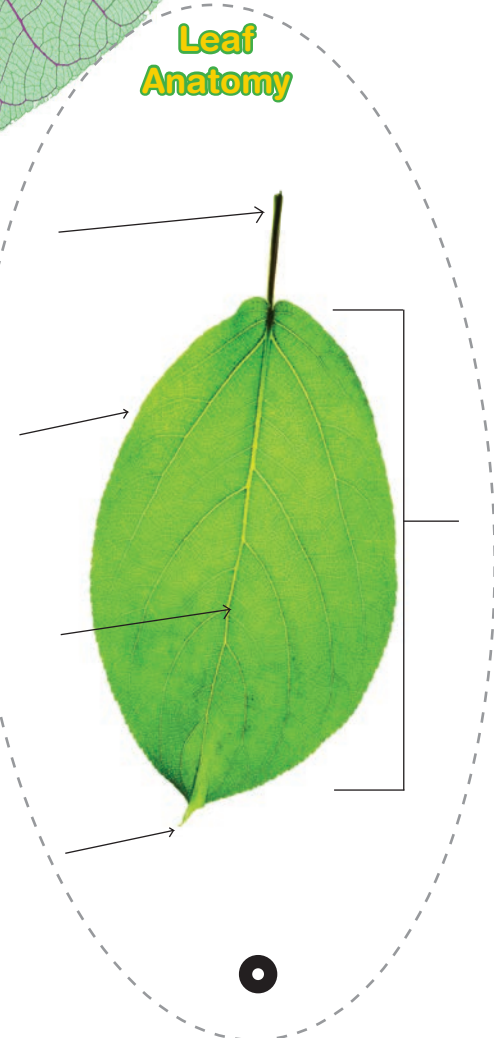
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**Instructions:**

1. Cut out this square with the instructions. It will serve as your Leaf Fan pocket on your "Leaves" paste page.
2. Cut out the green leaf.
3. Cut out the ovals.
4. On the ovals, write interesting facts you learned for each title listed.
5. Punch a hole through each oval and the leaf at the bottom black circle.
6. Secure the ovals, in any order, behind the leaf with a brass fastener.
7. Glue your pocket onto your "Leaves Minibook" paste page (**NJ p. 118**) along the bottom and sides, leaving the top open.
8. Insert your fan in the pocket for safekeeping.




Stomata  
are




Handwriting practice area with a dashed outline, a central dashed line, and a black dot on the left side.

Chlorophyll  
is




Handwriting practice area with a dashed outline, a central dashed line, and a black dot on the left side.

Transpiration  
is



Handwriting practice area with a dashed outline, a central dashed line, and a black dot on the left side.

Leaf  
Facts



Handwriting practice area with a dashed outline, a central dashed line, and a black dot on the left side.