Teacher's Guide

V is for Venus Flytrap: A Plant Alphabet

Author: Eugene Gagliano
Illustrator: Elizabeth Traynor

Guide written by Cheryl Grinn

This guide may be reproduced for use in the classroom with this express written consent of Sleeping Bear Press

Published by

Sleeping Bear Press
310 N. Main St., Suite 300
Chelsea, MI 48118
800-487-2323
www.sleepingbearpress.com
Everyone likes to see flowers in bloom. They not only look beautiful but many have a wonderful scent. Plants that last only one season and then die are called annuals. Discover more about annuals in the book *V is for Venus Flytrap*.

Leslie dropped her stack of note cards containing the names of the annual flowers for her garden. She wants her plant name cards to be in alphabetical order! Please help her!

<table>
<thead>
<tr>
<th>petunia</th>
<th>bachelor button</th>
<th>zinnia</th>
<th>begonia</th>
</tr>
</thead>
<tbody>
<tr>
<td>marigold</td>
<td>snapdragon</td>
<td>petunia</td>
<td></td>
</tr>
<tr>
<td>nasturtium</td>
<td>coleus</td>
<td>cosmos</td>
<td>heliotrope</td>
</tr>
</tbody>
</table>

Put the flowers in alphabetical order on the lines below.

1. ____________________  7. ____________________
2. ____________________  8. ____________________
3. ____________________  9. ____________________
4. ____________________ 10. ____________________
5. ____________________ 11. ____________________
6. ____________________ 12. ____________________
Trees are large plants. Children enjoy lying under the shade of a tree, climbing a tree, and hiding behind trees. There is nothing better than finding a large shady spot under a tree on a hot summer day.

The riddles describe the parts of a tree. Use the word box to help you solve each riddle.

<table>
<thead>
<tr>
<th>bark</th>
<th>roots</th>
<th>seeds</th>
<th>trunk</th>
<th>leaves</th>
</tr>
</thead>
</table>

1. Insects and weather can’t get by me.  
   My job is to protect the tree  
   I am the ________________________

2. Birds and the wind carry me to and fro.  
   They drop me down and a new tree I grow.  
   I am the ________________________

3. Deep in the ground I spread and grow,  
   just so the tree can stand tall in a row.  
   I am the ________________________

4. I keep the tree from being hungry.  
   I work with the sun and sleep under the moon.  
   I am the ________________________

5. I am the center of every tree.  
   Children hang on as they climb up me.  
   I am the ________________________
Coniferous and deciduous are two types of trees. Conifers keep their needles year round while deciduous trees lose their leaves yearly.

Place each tree from the word box below in the list that describes it.

<table>
<thead>
<tr>
<th>Coniferous</th>
<th>Deciduous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Maple</td>
<td>Oak</td>
</tr>
<tr>
<td>White Pine</td>
<td>Douglas Fir</td>
</tr>
<tr>
<td>Blue Spruce</td>
<td>Cherry</td>
</tr>
<tr>
<td>Flowering Dogwood</td>
<td>Black Gum</td>
</tr>
<tr>
<td>Cedar</td>
<td></td>
</tr>
</tbody>
</table>

Draw a picture of your favorite type of tree.
V IS FOR VENUS FLYTRAP

Bamboo Math

Bamboo is a fast-growing plant that is the main food source of pandas.

Assume that pandas eat 32 pounds of bamboo daily. Assume that bamboo grows 2 ½ feet per day.

Using those two assumptions, solve these problems.

1. Joe found a bamboo stalk that was 25 feet tall. How many days had it been growing? ________________

2. Paula Panda eats only bamboo. How many pounds of bamboo would she eat in 2 weeks? ________________

3. The bamboo forest had trees 10 feet tall, 21 feet tall, 42 feet tall, and 3 feet tall. What was the average height of these trees? ________________

4. If one bamboo stalk grew 2 ½ feet a day for 30 days, how tall would it be? ________________
A greengrocer is a merchant who sells fruits and vegetables. What is your favorite fruit? __________ What is your favorite vegetable? ________

Bob, the greengrocer, dropped all the signs he had with the names of the fruits and vegetables on them. The letters got all mixed up. Help Bob by unscrambling the names of these fruits and vegetables.

1. stebe __________________________________________________________________
2. ronc __________________________________________________________________
3. pleap __________________________________________________________________
4. eettlcu __________________________________________________________________
5. pcaeh __________________________________________________________________
6. crarot __________________________________________________________________
7. mttooa __________________________________________________________________
8. ape _____________________________________________________________________
9. yrrebeulb __________________________________________________________________
10. oaavcod __________________________________________________________________
11. rcrehy __________________________________________________________________
12. prpepe __________________________________________________________________
13. nukppmi __________________________________________________________________
14. snbae __________________________________________________________________
15. perag ___________________________________________________________________
V IS FOR VENUS FLYTRAP

Growing Zones

The zone map on the Z page of *V is for Venus Flytrap* will help you answer the questions below. Use the map and the key in your search for answers.

1. Name the state with the coldest zone ________________________

2. Name the state with the hottest zone ________________________

3. If oranges required a zone 9 to grow, would you be able to grow them outside in the state of Illinois? ________________

4. In which zone is most of Canada? _______________________

5. If a plant could not survive in temperatures below 0 degrees, what is the lowest number zone you could plant it in?_____________________

6. Why can’t you grow pineapple in Michigan? _____________

7. Name the state with the initials KS _______________________

8. Name the Canadian province BC _________________________

9. Name the country directly south of the United States _____________

10. Can you grow vegetables outside in Alaska? ________________

List the temperature zones in your state or province __________________

What is the temperature zone in your town? ___________________

What vegetables and fruit are grown in your town? _________________
People love to smell roses, look at roses, and grow roses. Dawn planted 100 rosebushes but a frost killed many of them. Use the problems below to figure out how many were left after the frost.

Cross out all of the problems that have wrong answers. Add up all the correct answers to find how many rosebushes survived.

1. $55 - 29 = 26$
2. $24 + 96 = 123$
3. $17 + 5 = 23$
4. $125 - 96 = 29$
5. $95 - 87 = 15$
6. $113 - 93 = 20$
7. $99 - 86 = 13$
8. $52 + 29 = 71$
9. $200 - 81 = 121$
10. $576 - 499 = 177$

Add all correct answers.

The total number of roses saved was _________________
The answer to each of the questions below can be found in the book *V is for Venus Flytrap*. Search hard for the answers, as some of them may be tricky.

1. Are raw dandelion leaves healthy to eat? __________________________
2. An annual plant’s life cycle lasts for how many years? _______________
3. What do we call insect-eating plants? _____________________________
4. Name the author of *V is for Venus Flytrap*. ______________________
5. How old is the tree named “Methuselah”?_________________________
6. Name the state that grows the most corn. _________________________
7. If you wanted to get rid of your bad breath, which herb would you eat to clean your breath? ________________________________
8. Trees absorb _______________________ from our atmosphere and give off ______________________
9. Name the flower that smells like rotting flesh.____________________
10. Where does kelp grow? ________________________________

Write a sentence describing something new you learned about plants in this book. __________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
Rain forests receive at least 80 inches of rain per year. How much rain is that? Let’s find out!

Use a yardstick to measure off 80 inches on the floor of your classroom.

List 3 things that are about 80 inches long. ____________________________
                                                                 ____________________________
                                                                 ____________________________

1. How many feet are in 80 inches? ________________________________
2. How many yards are in 80 inches? _______________________________
3. Find the yearly average number of inches of rain in your town. ______

List 5 reasons rain and rain forests are important to the world.

1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________
5. ____________________________

Draw a picture of you exploring the rain forest.
A bowl of cereal makes a yummy breakfast. But, how healthy is your bowl of cereal? Breakfast cereals are made of grains.

Compare 4 different brands of cereal to see if they are healthy. Choose 4 cereals and read the nutrition information on the side of the box. Fill in the information in each box below.

Which cereal would be the BEST choice for a healthy breakfast? __________

<table>
<thead>
<tr>
<th>Name</th>
<th>Grain</th>
<th>Calories per serving</th>
<th>Sugar per serving</th>
<th>Sodium per serving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Grain</td>
<td>Calories per serving</td>
<td>Sugar per serving</td>
<td>Sodium per serving</td>
</tr>
<tr>
<td>Name</td>
<td>Grain</td>
<td>Calories per serving</td>
<td>Sugar per serving</td>
<td>Sodium per serving</td>
</tr>
<tr>
<td>Name</td>
<td>Grain</td>
<td>Calories per serving</td>
<td>Sugar per serving</td>
<td>Sodium per serving</td>
</tr>
</tbody>
</table>
Our earth has limited resources and it is the responsibility of each one of us to conserve our resources. How can you help? One way is by composting at home. It is interesting to watch a compost pile de-compose.

1. Choose an area in your yard that won’t be disturbed by others or animals.
2. Collect fallen leaves, grass, and sticks and make a pile. You can throw vegetable scraps on your pile but don’t put meat scraps on it.
3. Wet your pile weekly with a hose and use a rake to stir your pile.

Use the chart below to record the changes you see in your pile over time. Keep this chart from when you start your pile until spring. Record data every two weeks.

<table>
<thead>
<tr>
<th>Date</th>
<th>Condition of the pile</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Condition of the pile</th>
</tr>
</thead>
</table>
Plants are a necessary part of our daily lives. What would the earth be like without plants? They give off oxygen, are used as food, and help to keep us cool. Green flowering plants have six parts: root, stem, leaf, flower, fruit, and seed.

Create a new plant species. Draw your plant below and label its six parts. Give your plant a name.

Explain what makes your plant special.
________________________________
________________________________
________________________________
________________________________
________________________________
How much sunlight do plants need to grow? Does it make a difference if you start them from seeds or if they are already growing? This experiment will help you to discover the answers to these questions.

**Materials**
3 small potted plants. Plants should be of the same species and in the same size pots.
3 small pots (the same size as those above) containing potting soil and seeds.

**Directions**
1. Plant your seeds in all three pots.
2. Place one plant pot and one seed pot in a very sunny place. Make sure it gets full sun all day.
3. Place one plant pot and one seed pot in a partly sunny place. These pots should spend at least ½ of the daylight hours in the shade.
4. Place one plant pot and one seed pot in an area that gets very little sun.
5. Water all plants daily.

Create a chart showing the growth of each set of pots.

<table>
<thead>
<tr>
<th>Full Sun</th>
<th>Partial Sun</th>
<th>Shade</th>
</tr>
</thead>
</table>

What did you discover about plants and light? ________________________
__________________________________________________________
V IS FOR VENUS FLYTRAP

Making a Biome Flip Book

A biome is a large similar group of plant communities created by climate. Rain forests, jungles, freshwater, ocean, and desert are all types of biomes.

Chose one of the above biomes and make a flip book showing plants and animals that can be found in your biome. Draw a picture of a plant or animal and write 3 sentences describing it on each page. Don’t forget to color your drawings.

Flip book directions
1. Stack three sheets of paper so that each sheet is one inch lower than the sheet above it.
2. Fold the bottoms of the three sheets up so that each of the layers are equal distance apart.
3. Staple your stack together along the folded edge.
4. Use the top sheet as your cover. This should have a general picture and title of your biome on the cover.
5. Draw pictures and write descriptions of your biome on each sheet inside.
6. Color your pictures.
7. Share your book with a friend!

Which biome did you choose? ____________________________
Many people live in an apartment or a home where they don’t have a yard of their own. Can they still grow flowers and vegetables? Of course they can! All they need is a container, some seeds, and a sunny window. Container gardening is a very popular way of gardening. Give it a try!

**Materials**
- Planter, flower pot, or anything that will hold soil and still drain well
- Potting soil or dirt
- Seeds of your choice
- Small stones or gravel
- A sunny window or balcony

**Directions**
1. Make sure your container has holes in the bottom or sides for water to drain out.
2. Spread gravel on the inside bottom of the container.
3. Fill container 2/3 full with dirt or potting soil.
4. Mix the soil so there are no lumps.
5. Plant seeds according to seed packet directions, or plant a small plant that is already growing.
6. Water the seeds or plant.
7. Place the container in a sunny window or on a balcony or porch.
8. Keep soil moist but don’t over water!
9. Be patient and watch your plant grow.
10. Enjoy your flower or vegetable.
Fantastic fruit is just one of the many plants you can learn about in the book *V is for Venus Flytrap*. Can you eat a Venus flytrap? Read and find out!

Fruits are divided into different categories. List at least 3 fruits in each category and then draw a picture of your favorite fruit in each category.

**Botanical Fruits**  
**Citrus Fruits**

**Berry Fruits**  
**Orchard Fruits**
Everyone needs to eat well-balanced meals. Plants should be a huge part of your daily diets. Research the current food guide pyramid and use it to plan a balanced day of meals for your family.

Breakfast

Lunch

Dinner
There are many amazing facts to be learned in the book *V is for Venus Flytrap*.

Pretend you have just been hired as a reporter of *The Desert Explorer* newspaper. Your first assignment is to explore the desert. During the exploration you make an exciting discovery! Write an article about your discovery.

Use this graphic organizer to help you.

Who? ____________________________________________
What? _____________________________________________
Where? _____________________________________________
When? ______________________________________________
Why? _______________________________________________
How? ______________________________________________

Make sure your story has a headline that will make people want to read it.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
We are losing our rain forests in many parts of the world. Should we care? Do you care? Are rain forests important?

Write a letter to the newspaper expressing your opinion on the following question- SHOULD WE USE AMERICAN TAXPAYER MONEY TO TRY TO SAVE THE RAIN FORESTS IN BRAZIL?

1. State your opinion in a complete sentence.
2. Write at least 3 complete sentences stating FACTS that support your opinion.
3. In your last sentence restate your opinion using different words.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Trees are all around us. It doesn’t matter if you live in the city or in the country, it won’t take much looking to find a tree growing near you.

Find a comfortable spot to sit and think about trees, preferably outside under a tree!

Answer these questions about the tree you’re thinking about.

1. What does the tree look like? ________________________________

2. What does the tree smell like? ________________________________

3. What does the bark feel like? ________________________________

4. Describe a leaf ________________________________

5. What does the tree sound like? ________________________________

6. Describe the shape of the tree ________________________________

Use this information to write a poem about your tree.
Rain forests are an important part of our world’s ecosystem. Many yet-to-be-discovered plants and animals live in the rain forest. There are four distinct layers in the rain forest.

1. The **forest floor**—the floor of the rain forest—covered with moss and decaying leaves and small plants like ferns.
2. The **understory**—contains woody plants, palms, and young trees that can grow in the shadows of the next higher layer.
3. The **canopy**—trees reaching as much as 100 feet tall, forming a green roof over the forest below.
4. The **emergent layer**—trees that grow very tall, taller than those in the canopy. They receive full sun.

**Draw and label the rain forest and each of its layers.**
Your class can have fun by growing its own salad! Study the different vegetables in *V is for Venus Flytrap* and decide which vegetables would make a good tasting, healthy salad.

Divide the class into small groups. Each group will need the following materials.

**Materials**
- Flower pots
- Vegetable seeds—divide the types of vegetables between groups
- Potting soil

**Procedure**
1. fill flower pot with potting soil
2. carefully read the seed package and plant the seeds according to the directions
3. water your seeds
4. keep soil moist, check daily
5. place the pot in a sunny window
6. when the class vegetables are grown, harvest, and make a class salad

List your favorite vegetables.
1.
2.
3.
4.
Discover the amazing insect-eating Venus flytrap in the book *V is for Venus Flytrap*.

Pretend the Venus flytrap became so big and strong that they could devour animals and even people! Write a story about your encounter with a **Super Venus Flytrap**!

Draw an illustration to go with your story.
V IS FOR VENUS FLYTRAP

Use your knowledge about plants and your imagination and creative thinking as you answer each of these questions.

1. What would happen if a tomato had wings? _______________________.
   _______________________.
   _______________________.
   _______________________.
   _______________________.

2. What would happen if there was no pollution? _______________________.
   _______________________.
   _______________________.
   _______________________.
   _______________________.

3. How would you feel if you were an epiphyte growing in a jungle? _______________________.
   _______________________.
   _______________________.
   _______________________.
   _______________________.

4. How would you feel if you were a rafflesia plant and everyone made bad faces when they were near you? _______________________.
   _______________________.
   _______________________.
   _______________________.
   _______________________.

5. How would it feel if you were an apple and someone just took a big bite out of you? _______________________.
   _______________________.
   _______________________.
   _______________________.
   _______________________.
Discover what a xeriscape is by reading *V is for Venus Flytrap*, and why it is important in some areas.

1. Make a list of plants and animals that can survive in the desert.

2. Use a sheet of paper to plan your desert.

3. Make a model of a desert and its plants and animals in a shoebox.

Write a paragraph explaining why xeriscape is important to the planet.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Alphabetical Animals- bachelor button, begonia, coleus, cosmos, heliotrope, marigold, nasturtium, pansy, petunia, snapdragon, sunflower, zinnia

A Tree Riddle- 1) bark  2) seeds  3) roots  4) leaves  5) trunk

Leaves or Needles- Conifer- Douglas Fir, Blue Spruce, Cedar, White Pine Deciduous- Red Maple, Oak, Cherry, Black Gum, Flowering Dogwood

Bamboo Math- 1) 10 days  2) 448  3) 19 ft.  4) 75 ft.

The Mixed-Up Greengrocer- 1) beets  2) corn  3) apple  4) lettuce  5) peach  6) carrot  7) tomato  8) pea  9) blueberry  10) avocado  11) cherry  12) pepper  13) pumpkin  14) beans  15) grape

Temperature Zones- 1) Alaska  2) Hawaii  3) no  4) 2  5) zone 7  6) too cold  7) Kansas  8) British Columbia  9) Mexico  10) yes

Rose Math- Incorrect answers- 2, 3, 5, 8, 9, 10  88 left

Seek and Find- 1) yes  2) one  3) carnivorous  4) Eugene Gagliano  5) 4,733  6) Iowa  7) parsley  8) carbon dioxide, oxygen  9) rafflesia  10) ocean

It’s raining, It’s pouring- 1) 6 ft. 8 in.  2) 2 yds. 8 inches