



Education & Activities

Investigate and Identify

Put your detective caps on to find the answers to the following questions! HINT...the Learning Sheds, volunteer Docents and our self-guided tour brochures, including the Guide to the Circus Trees brochure can be your best sources of information. All brochures can be found at Information, Please!

Learning Shed Questions

1. Name a type of rock that is native to California. _____ (Learning Shed #1)
2. What do you call a tree or shrub that has been trimmed into a special shape? _____ (Learning Shed #4)
3. How many baby elephant topiaries are in the park? _____ (Learning Shed #4)
4. Name a "good" bug. _____ (Learning Shed #4)
5. There is only one tree that has never been transplanted. Where is it located? _____
(Learning Shed #3)
6. Name three reasons why trees are important. a. _____ b. _____ c. _____
(Learning Shed #3)
7. Who is Axel Erlandson? _____ (Learning Shed #4)
8. Name two creatures that use trees as their homes. a. _____ b. _____ (Learning Shed #4)
9. Which Circus Tree is the oldest? _____ (Learning Shed #4)
10. Name a "bad" bug. _____ (Learning Shed #4)

Garden Questions

1. Some trees have leaves. What do pine trees have? _____ (a pine tree is considered a conifer)
2. Where can you find the seeds on a conifer tree? _____
3. What Garden can you find a lot of conifers in? _____ (Have you asked a Docent for assistance yet?)
4. Hibiscus flowers only last one day. In which Garden do we have hibiscus trees? (Have you spotted any butterfly topiaries?) _____
5. In which Garden can you find coffee trees? _____
6. Name at least 4 fruits growing in Monarch Garden. a. _____ b. _____ c. _____ d. _____
7. What is the name of the tree in Monarch Garden that is covered with sharp spines? _____
8. Where can you find a large amount of basalt rock in the Park? _____
9. Who is Michael Bonfante? _____
10. What city is associated with the following fruit or vegetable?
Artichokes _____
Garlic _____
Mushrooms _____
Strawberries _____

Grades 3-6

At Home Lessons:

Have students take apart a flower. Lay the individual parts on the matching part of the diagram.

Investigate and Identify

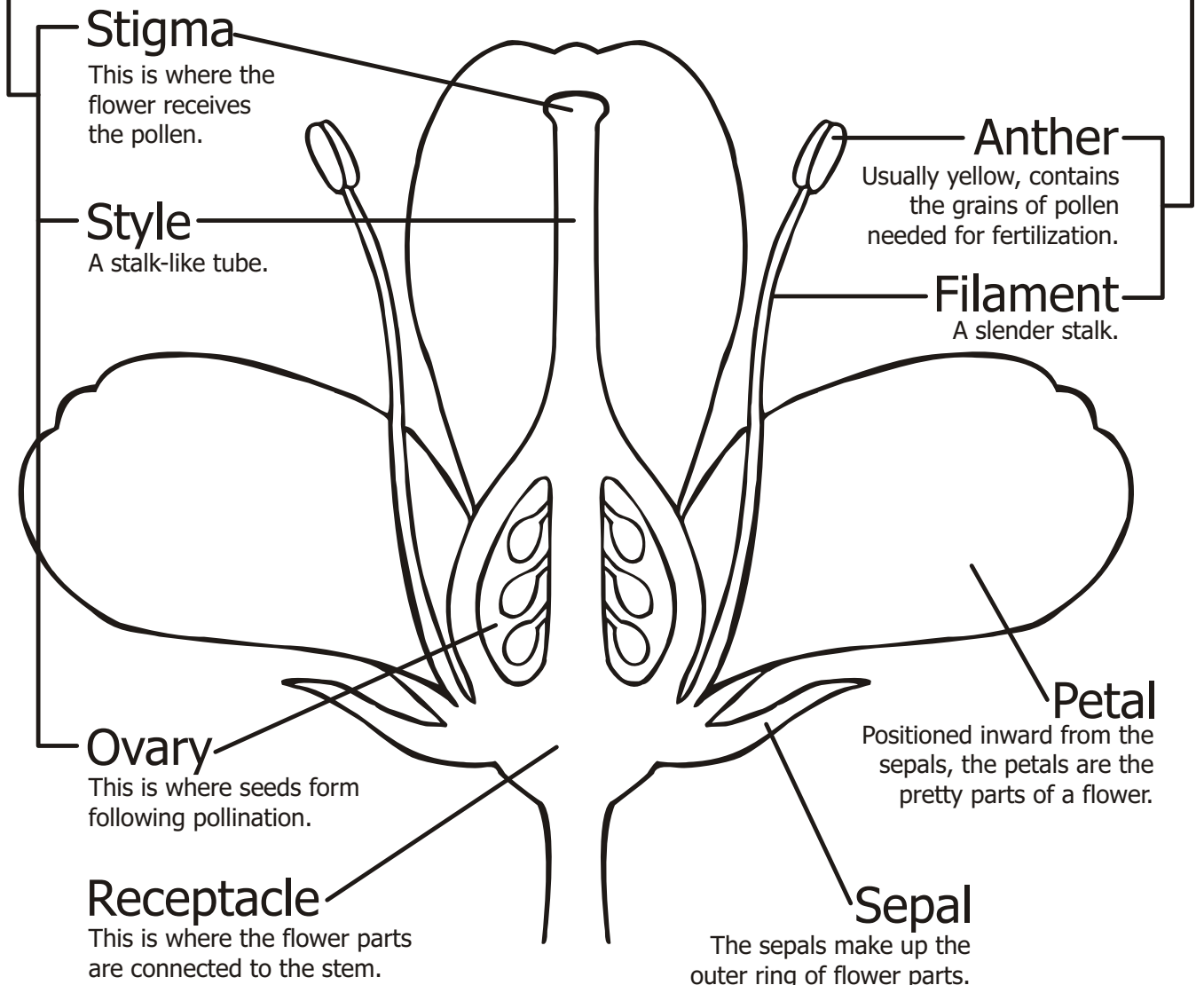
Anatomy of the Perfect Flower

PISTIL (female)

Found in the center of the plant and consists of the female reproductive parts.

STAMEN (male)

Positioned inward from the petals and consists of the male reproductive parts.



Investigate and Identify Plant Structure

Stem

The main part of the plant that supports leaves, flowers or fruit.

Leaf

A thin, flat part that grows from the petiole which is attached to the stem.

Node

The joint where a leaf starts to grow.

Soil Surface

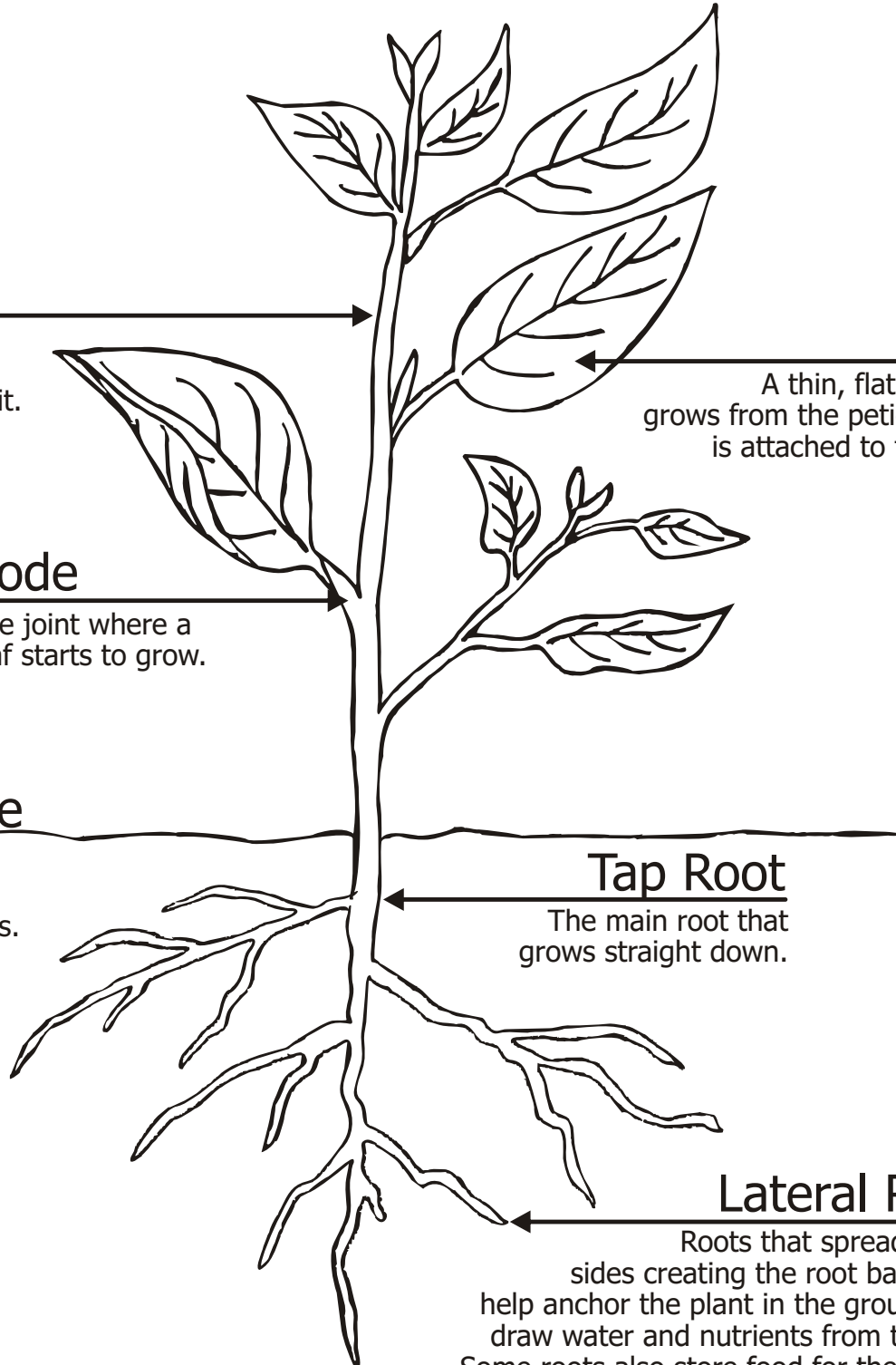
Plants depend on soil for support, water and nutrients.

Tap Root

The main root that grows straight down.

Lateral Root

Roots that spread to the sides creating the root ball. They help anchor the plant in the ground and draw water and nutrients from the soil. Some roots also store food for the winter.



Grades 4-6

At Home Activity:

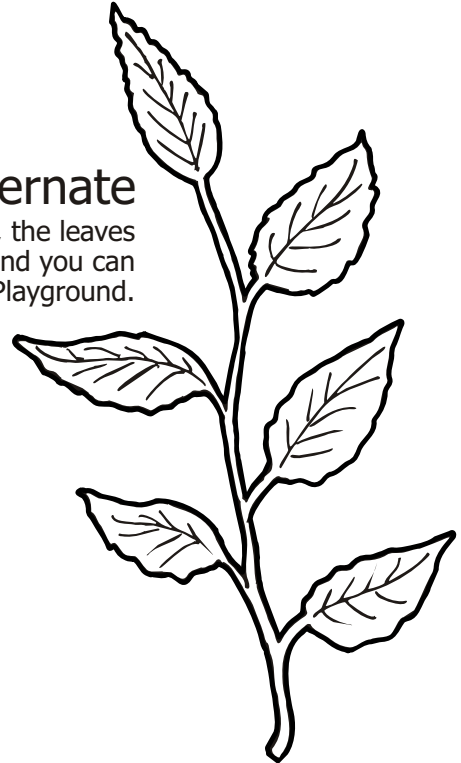
Use watercolors and paint strokes to paint the different types of leaves.

Investigate and Identify Leaf Arrangements

Alternate

A single leaf is present at each node, the leaves alternate. Roses have alternate leaves and you can find roses across from Oak Park Playground.

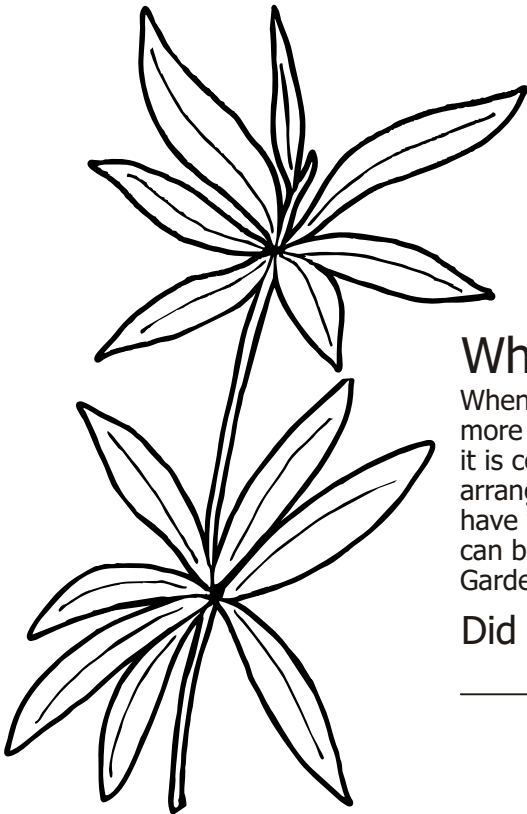
Did you find an example?



Whorled

When there are three or more leaves at each node it is considered a whorled arrangement. Schefflera have whorled leaves and can be found in Monarch Garden.

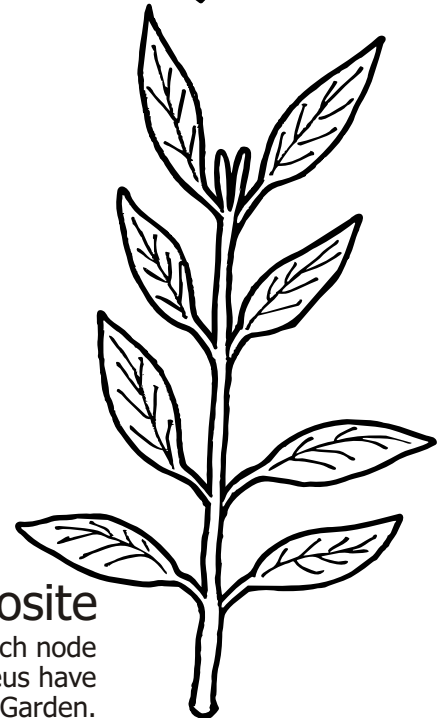
Did you find an example?



Opposite

Plants with two leaves present at each node have an opposite arrangement. Coleus have opposite leaves and can be found at Monarch Garden.

Did you find an example?



Pre-Visit Activity - - Word Search

Look carefully in the letter jumble and try to find all the words from the list below.
Look up, down, sideways, diagonal and backward. Circle the words you find.

M N P R T Y U I O P L K E J H G
D E A Z A H S E Y L I M A F D F
X C R B N M I M L K E H G F D T
S O K I U Y T S R H A Q U Q W R
E O L J G F D S T W E V G N M E
E M I C H A E L B O N F A N T E
R F D S O A Z X C V R B R N M S
T K C O R H J E T R U Y D W Q A
S R T Y T P O I K J U H E H S D
U Z X C I V B R I D E S N N M P
C Y T R C W Q A S D F G H K L J
R U I O U P L I J U H Y G A T F
I X G I L R O Y Z S A Q N W E R
C C F V T G B H N J M T K M K L
D W F E U R R T Y I S J U I A P
S U A E R U T L U C I R G A L J
N X F B E J U Y H T G R F E D E

AGRICULTURE
CIRCUS TREES
FAMILY
FUN
GARDEN
GILROY

HISTORY
HORTICULTURE
LAKE
MICHAEL BONFANTE
PARK

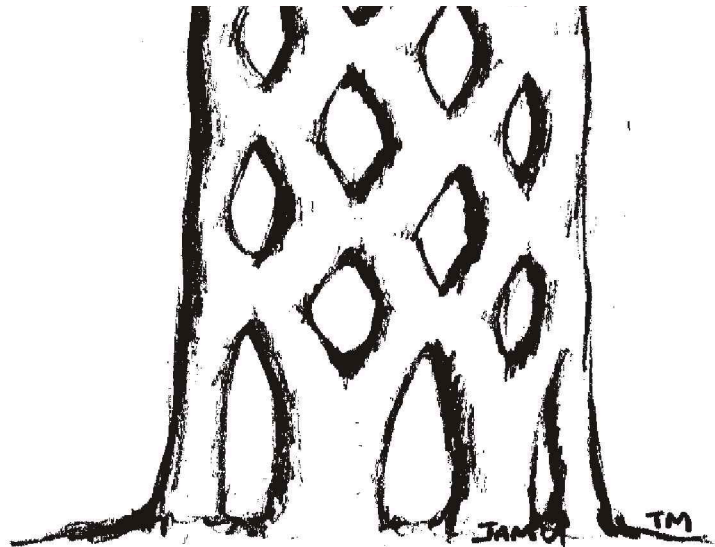
PLANTS
ROCK
RIDES
THEME
TREES

Grades 3-6

Draw the other half of each Circus Tree.

Color the Circus Trees

Basket
Tree



Four-
Legged
Giant

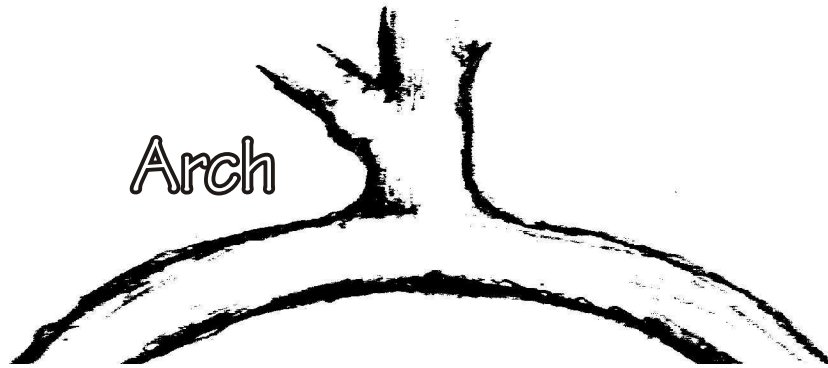


Axel Erlandson used several American Sycamores trees (**Platanus occidentalis**) to create the Circus Trees.
How many do you think he used to create the Basket Tree? _____ Can you tell where one tree begins and the other ends?
How many did he use to create the Four-Legged Giant? _____ Did you know this tree is over 80 years old?

Grades 3-6

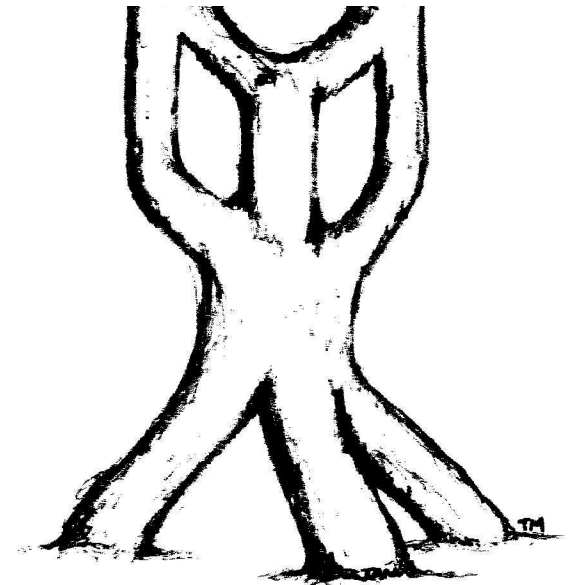
Draw the other half of each Circus Tree.

Color us, too!



Arch

Emblem



Mr. Erlandson also created these Circus Trees from American Sycamores (**Platanus occidentalis**).
How many did he use to create the Arch tree?_____ You'd never guess the center of the arch is 9'7" tall, would you?
How many to create the Emblem tree?_____ Did you know it's been planted at Pinnacles Rock Maze since July 1997?

What is a Circus Tree?

Before you visit---
Draw a picture of what you
think a Circus Tree looks like.

After you visit---
Draw your favorite Circus Tree.

Answers

Learning Shed

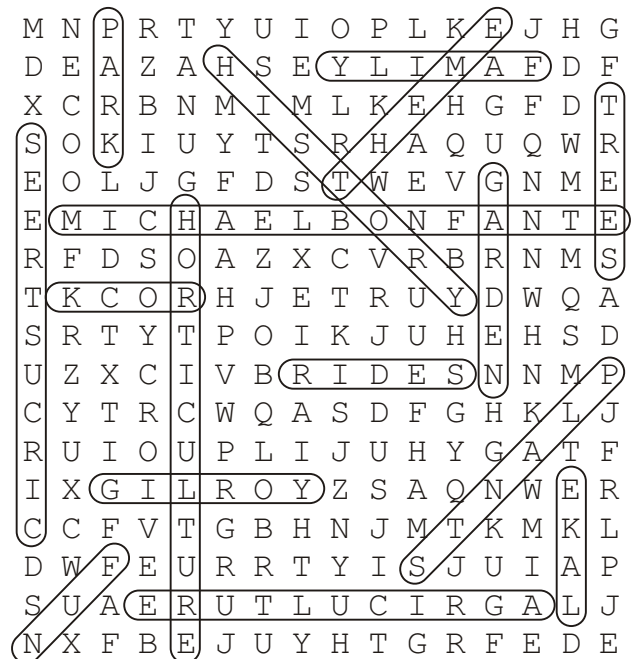
1. Name a type of rock that is native to California. Granite (Learning Shed #1)
2. What do you call a tree or shrub that has been trimmed into a special shape? Topiary (Learning Shed #4)
3. How many baby elephant topiaries are in the park? One on the east side of Lakeside Amphitheater (Learning Shed #4)
4. Name a "good" bug. Ladybug (Learning Shed #4)
5. There is only one tree that has never been transplanted. Where is it located? In the Center of the Artichoke Dip ride (Learning Shed #3)
6. Name three reasons why trees are important. a. oxygen b. animal habitat c. shade also: fruit, nuts (Learning Shed #3)
7. Who is Axel Erlandson? The man who created the Circus Trees. (Learning Shed #4)
8. Name two creatures that use trees as their homes. a. Chipmunks b. Hawks also: butterflies, bugs, eagles, etc. (Learning Shed #4)
9. Which Circus Tree is the oldest? The Four-Legged Giant. It was started in 1926. (Learning Shed #4)
10. Name a "bad" bug. Aphid, whitefly, mealy bug (Learning Shed #4)

Garden

1. Some trees have leaves. What do pine trees have? Needles (a pine tree is considered a conifer)
2. Where can you find the seeds on a conifer tree? In the cone
3. What garden can you find a lot of conifers in? Claudia's Garden (Have you asked a Docent for assistance yet?)
4. Hibiscus flowers only last one day. In which Garden do we have hibiscus trees? (Have you spotted any butterfly topiaries?) Monarch Garden
5. In which garden can you find coffee trees? Monarch Garden
6. Name at least 4 fruits growing in Monarch Garden. a. Banana b. Avocado c. Mango d. Papaya
you can also find: Pineapple Guava, Strawberry Guava, Cherimoya, Sapote (black, white, and yellow)
7. What is the name of the tree in Monarch Garden that is covered with sharp spines? Chorisia Floss Silk Tree
8. Where can you find a large amount of basalt rock in the Park? Bonfante Falls
9. Who is Michael Bonfante? Founder of Gilroy Gardens Family Theme Park
10. What city is associated with the following fruit or vegetable?

Artichokes
Garlic
Mushrooms
Strawberries

Castroville
Gilroy
Morgan Hill
Watsonville



Notes