HARVEST OF THE MONTH PRESENTS...

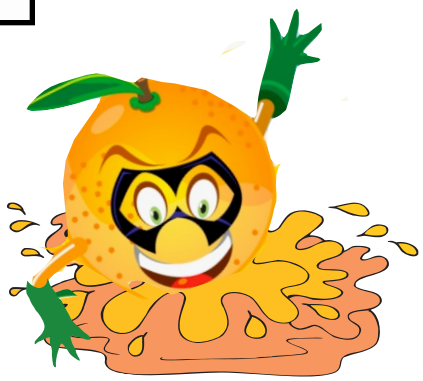
FREE! Harvest of the Month — Network for a Healthy California

HARVEST HEROES!

APPROVED BY THE COMICS CODE AUTHORITY

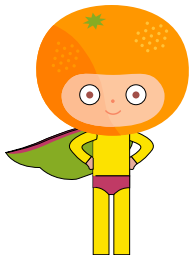
JAN 2008

GRADES 5–8



JUICY VALENCIAS

Thirsty Blood Oranges



MAGNIFICENT MANDARINS

Introducing this month's heroes...

THE OUTSTANDING ORANGES!

NEAT NAVELS

YEE-OW! YOU MEAN THERE'S MORE THAN ONE WAY TO SKIN A CAT, I MEAN, PEEL AN ORANGE?!!

HOLEY MACARONI! YOU MEAN VITAMIN C ISN'T THEIR ONLY POWER?!!

GREAT SCOTT! THEY'RE ALL SO SIMILAR, BUT YET STILL SO DIFFERENT

This material was created and approved as an extension to the Harvest of the Month tool kit developed by the *Network for a Healthy California.*

LEARN MORE INSIDE!

Montebello Nutrition Services

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CHAMPIONS for CHANGE — Network for a Healthy California

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FUNDING OF THIS PROGRAM REQUIRES BOTH TYPES OF DOCUMENTATION... THANK YOU!!!

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THE OUTSTANDING ORANGES!

GROW-ETRY.

How we grew to be the heroes we are...

We're honored to be recognized as this month's heroes,
Worried about diseases? There's no reason to fear-o!
We're daring, yet tasty... abundant, yet unique,
We're perfect right now because we're at our peak!

We were born over 4,000 years ago, a mixture of two fruits,
The pomelo was our dad so big... the mandarin our mom so cute!
There are so many varieties, but with these few we'll ask you to take a plunge,
Introducing valencias, mandarins, navels, tangelos, and the blood orange!

Valencias are extra juicy, but they're not available until the summer time,
The mandarins, with hardly any seeds and so easy to peel - it should be a crime!
The navels have a belly button, the tangelos have their knob,
The blood oranges with flesh so red, is it your blood they want to rob?!!

Fortunately we are superheroes that are all on your side,
Because we've got all these special powers located on our insides...
Learn all the benefits of phytochemicals, vitamin C, and folate,
We have potassium, fiber, and carbohydrates to keep you feeling great!

So how can you take advantage of eating this heroic produce?
There's so many other ways to eat them that go beyond just their juice...
Cut them like a basketball, or cut them into "smiles,"
Remove the skin in many ways, the peeling methods are so versatile!

The best time to enjoy most oranges is from late fall to spring,
For this time of year is when most oranges will "do their thing"...
But what if it's July, and orange cravings are making you drool?
Valencias are at peak in summer, so their juice will keep you cool!

And when at the store, how might you pick an outstanding one?
Pick 'em bright and glossy, and firm and smooth, and eating it will be fun...
Don't worry about brown "scars," these are normal and don't affect the quality,
Don't depend on skin color as some are artificially colored, and valencias can be green!

We're honored to be recognized as this month's heroes,
Worried about diseases? there's no reason to fear-o!
We're daring, yet tasty... abundant, yet unique,
We're perfect right now because we're at our peak!

- Ben Bratcher, 2008

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THE OUTSTANDING ORANGES!

TOP SECRET INFO.

WHO IS THIS HERO?

- Orange varieties include the sweet orange, the sour orange, and the mandarin orange (also called tangerines).
- The 3 major varieties of sweet oranges are Valencia, Navel, and Blood oranges.
- Mandarin oranges are small, seedless and easy to peel.
- Although orange in color, don't be surprised to see green spots on Valencia oranges – it's normal and won't affect taste.
- Inside of the peel, or "rind," are sections of juicy fruit.
- They give off a distinct and pleasing aroma, which is due to the oils found in the peel.
- Oranges grow on trees, in a field called a grove.
- The orange is a hybrid fruit, meaning it was made by combining 2 other fruits, possibly a pomelo (another citrus fruit) and the mandarin.

A LITTLE HISTORY...

Around 4000 B.C. people were eating oranges, but they were much more bitter. The word "orange" is a word that comes from Sanskrit, an ancient Hindu language.

On one of his voyages in 1493, Columbus brought over the fruit to the New World. But it wasn't until 1769 when oranges were introduced to California from Mexico. The California Gold Rush created a demand for them as miners and their families faced a lack of nutritious foods. In fact, many suffered from scurvy, a Vitamin C deficiency. Demand and prices for Vitamin C-packed citrus fruits, like oranges, skyrocketed!

Today, the U.S. is the second-leading producer of oranges in the world!

WHEN ARE THEY "IN SEASON"?

While California oranges can be found at your local market from late fall to spring, the "peak season" for most of these heroes, except for Valencias, is right now in December and in January.

These guys grow best in the warmer climates of California, Texas, and Florida. Most of the citrus grown in the West is destined for the fresh fruit market rather than processed for juice. The ideal climate here permits the growth of fruit that is as pleasing to the eye as it is to the taste.

The advantages of buying California-grown fruits and vegetables "in season" are that they are fresher, more affordable, and environmentally friendly, since the pollution created from the out-of-state transportation of produce is reduced. Check the sticker to see if it's "CA-grown" or not.

DID YOU ALSO KNOW ?

- The U.S. produces the sweet oranges, while Spain produces the sour varieties, known as Sevilles. These are used mostly in marmalade.
- After chocolate and vanilla, orange is the world's favorite flavor.
- Americans consume most of their oranges in the form of juice (but you miss out on the fiber when drinking the juice instead of eating the fruit itself).
- They were once considered a luxury among Italian nobility.
- Ever notice the extra orange segments that grow at the end of a navel orange? This is a mutation that causes a conjoined twin orange to grow within the peel of the larger orange.

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THE OUTSTANDING ORANGES!

TOP SECRET INFO.

ORANGE POWERS

Like orange-colored canon balls, oranges provide a nutrition blast... B O O M! These are some of the powerful nutrients in oranges! (Nutrients are substances in foods that help our bodies grow and stay healthy).

FIBER!

Fiber helps keep energy levels steady; lends a mighty hand to your intestines to prevent constipation; and may also lower cholesterol levels.

VITAMIN C !

Vitamin C helps fight infection and heal cuts. One orange provides about 90% of the vitamin C you need in a day!

Folate!

Also referred to as "folic acid," this B vitamin, has shown to play an important role in helping prevent birth defects. It also helps manufacture DNA required for all your rapidly growing cells.

PHYTOCHEMICALS!

Pronounced "fight-o-chemicals," these powerful plant chemicals may strengthen your body against diseases like cancer and heart disease!

POTASSIUM!

A mineral necessary for your muscles, nerves, heart and kidneys - that's a lot of responsibility!

CARBOHYDRATES!

Carbohydrates are the main source of energy for our bodies. Without these, our fuel tanks would be empty and our brains wouldn't work!

LEARN MORE ABOUT US INSIDE! AND THEN HELP OUR COUSIN, THE TANGELO, FIGURE OUT HIS IDENTITY AND HOW HE GOT HIS KNOB!

JUICY VALENCIAS

NEAT NAVELS

MAGNIFICENT MANDARINS

Thirsty Blood Oranges

THE ?????? TANGELO

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THE OUTSTANDING ORANGES!

ACTIVITY OVERVIEW: 5-8

ACTIVITY	CALIFORNIA CONTENT STANDARDS grade 5	grade 6	grade 7	grade 8
KWL Chart: "What Do You Know About Oranges?"	• Reading Comp 2.3, 2.4	• Reading Comp 2.4	• Reading Comp 2.1 , 2.2	• Reading Comp 2.3
Double Bubble Map®: The Sweet Orange Family	• Reading Comp 2.1, 2.5	• Reading Comp 2.2, 2.3, 2.4	• Reading Comp 2.1	• Reading Comp 2.3
Flow Map®: How Do You Eat Them?	• Reading Comp 2.3, 2.4, 2.5	• Reading Comp 2.5	• Reading 2.2, 2.3	• Reading Comp 2.3
Creative Writing.	• Writing Strategies 1.2	• Writing Applications 2.1	• Writing Applications 2.1	• Writing Strategies 1.1
How to Pick an Outstanding One	• Reading Comp 2.3	• Reading Comp 2.3, 2.4	• Reading 2.2, 2.3	• Reading 1.3 • Reading Comp 2.3
Circle Map®	• Reading Comp 2.3, 2.4, 2.5	• Reading Comp 2.3, 2.4	• Writing Applications 1.2, 1.3	• Reading Comp 2.3
Math Connections	• Algebra &Functions 1.1	• Number Sense 2.1 • Algebra & Functions 2.1	• Number Sense 1.0	• N/A
Nutrition Facts.	• Algebra & Functions 1.1	• Mathematical Reasoning 2.4	• Mathematical Reasoning 2.5	• N/A
Science Connections	• Investigation & Experimentation 6 (c)	• Investigation & Experimentation 7 (a), (d)	• Investigation & Experimentation 7 (e)	• Investigation & Experimentation 9 (a)
Let's Review	• Reading Comp 2.3, 2.4, 2.5	• Reading Comp 2.2, 2.3, 2.4, 2.5 • Reading 1.2, 1.4	• Reading 1.3	• Reading 1.3 • Reading Comp 2.3, 2.4, 2.5
Use Your Senses	• Reading Comp 2.1	• Writing Application 2.1 (b)	• Writing Application 1.2	• Writing Application 2.1 (a)

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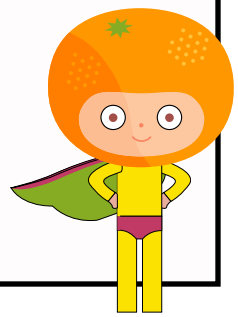
THE OUTSTANDING ORANGES!

WHAT DO YOU KNOW ABOUT ORANGES?

K WHAT DO YOU ALREADY KNOW?

W WHAT DO YOU WANT TO KNOW?

L WHAT DID YOU LEARN?



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THE OUTSTANDING ORANGES!

THE SWEET ORANGE FAMILY TREE.

JUICY VALENCIAS

- We are the "JUICY VALENCIAS," known for all the juice that our round bodies can produce.
- Our thin skin may be thin, but we have lots of juice within!
- Don't be surprised... if you see green spots on us gals and guys. This "re-greening" happens to our type... but not to worry, 'cause even if we got green, we're still so ripe!
- We're also called the "oranges of summer," so if you want us fresh in the winter, oh what a bummer. You can find us from February to October, but we're at our peak in May, June and July, that's when you'll see the freshest supply!

NEAT NAVELS

- Let me explain why we're called the "NEAT NAVELS"...
- We're NEAT because we're clean to eat: no seeds to excrete... our peel comes off easy and complete... and no problems removing the fruit segments that are so sweet!
- We're "NAVELS," because of our "belly button" you see... take a look at at the opposite end of our stem - we think you'll agree! The bigger it is, the sweeter we will be!
- Our skin is a little thicker, but that makes removing it so much easier and quicker.
- At our peak from January to March, you can find us up until May, but November is when our season officially starts.

Thirsty Blood Oranges

- We're the "BLOOD THIRSTY ORANGES," and "orange" you glad we're on your side? We're not thirsty for your blood... but we suck disease dry and they hit the ground with a THUD!!!
- Don't be so scared away by our name, though it's brought us such fame... on the inside we contain, a flesh that can be as pretty as a lion's mane, and it is as red as a maroon candy cane...
- Like navels we can peel to perfection and we're easy to section, and hardly any seeds upon inspection.
- Looking for some excitement and thrill? Our bloody flesh is available from December to April.

MAGNIFICENT MANDARINS

- The "MAGNIFICENT MANDARINS" (also called "tangerines")...
- We're MAGNIFICENT because: we're one of the easiest to peel, like unzipping a zipper... far less seeds on us than stars on the Little Dipper... and we're tasty and small, unlike King Kong's slipper...
- We're easily to spot because of the "oblate" shape in which we appear... oblate shaped things are not entirely round, but more like a partially flattened sphere...
- Clementines are one of the more popular stocks... many times sold in the small wooden crate box...
- And when the holidays are near, you'll remember... we're always available in November and December.

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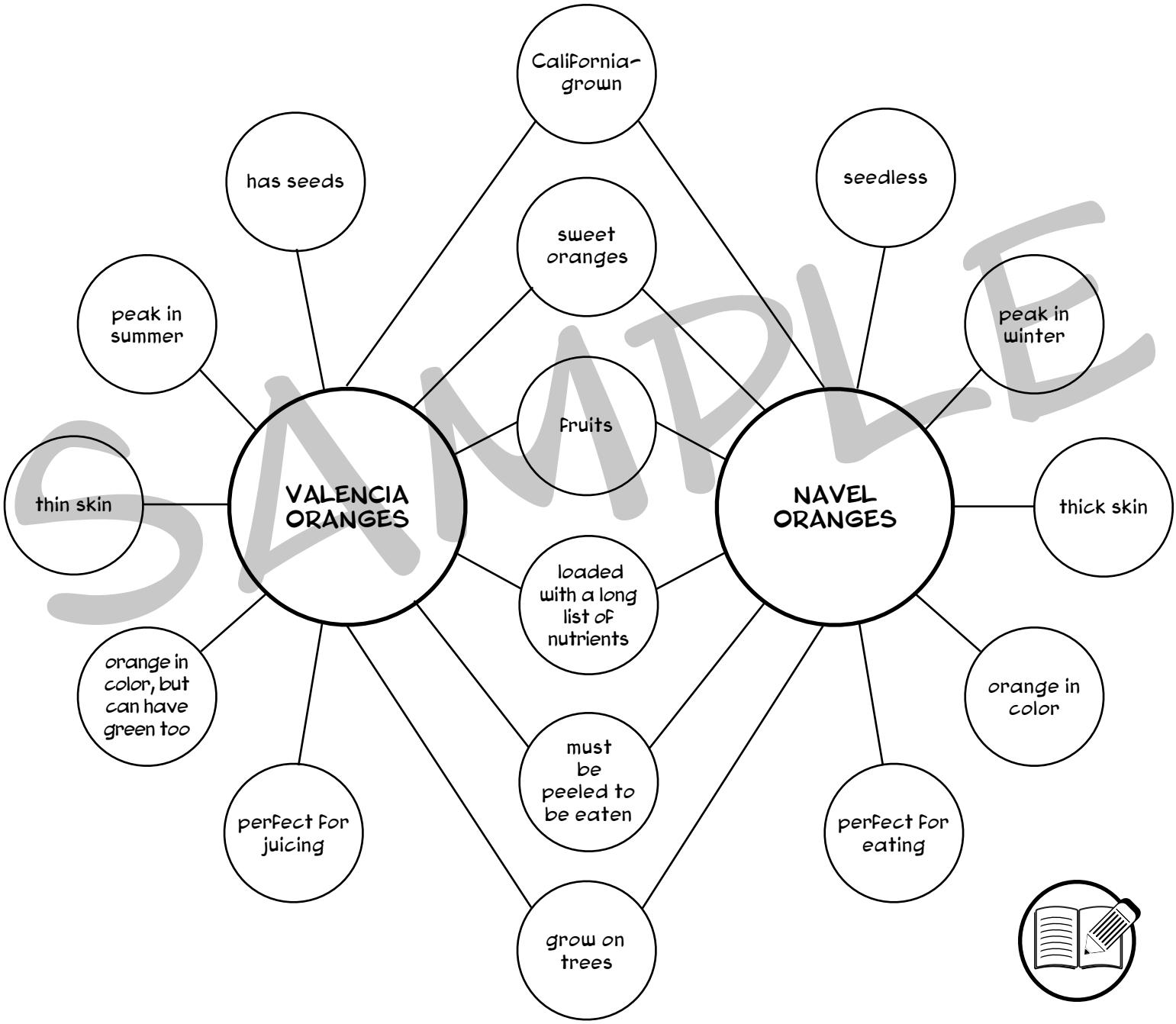
THE OUTRAGEOUS ORANGE!

DOUBLE BUBBLE MAP®: THE ORANGE FAMILY

Following is an example of characteristics to include using a Double Bubble Map® to compare and contrast 2 varieties of sweet oranges, valencias and navels, but students can take their pick of any of the ones showcased in these lessons. (This activity can be done both before and after the taste test.) In another utilization of this activity, students can possibly compare and contrast another fruit with the orange.



SAMPLE

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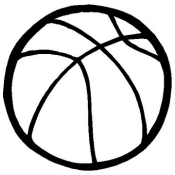
THE OUTSTANDING ORANGES!

FLOW MAP®: HOW DO YOU EAT THEM?

Here are just a few ways to devour these citrus fruits and tap into their immense powers. What's your favorite way? Describe the order of steps through use of a Flow Map®...



THE BASKETBALL

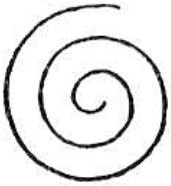
You can't use oranges as basketballs, but you can peel them like one... well kinda. Slice off the stem end of the fruit; now if looks like it has a flat top). Without cutting into the flesh of the fruit, gently "score" the peel with a plastic knife into quarters, kinda like the lines on a basketball. Then, pull the peel away with your fingers and slam dunk the segments in your mouth...

He slices... he scores... he peels... and he EATS! The crowd goes wild!

THE VAMPIRE

First, make sure there's no garlic or sunlight lingering around. Coast clear? Good. Now roll an orange under the palm of your hand like a rolling pin to get the juices running. Next, cut a hole in the top and suck the juice loudly out of that poor orange as if it were your only meal for the night. Do this until the opening cracks and forces you to tear it open completely and attack the remaining flesh with your teeth. Mwuah-ha-ha-ha-ha!

Afterwards, you may have to lock yourself in the bathroom with lots of floss. (Toothpicks might work, but since you're a vampire, they might be easily confused with mini wooden stakes, and you should know better than to bring those around a vampire...).



THE SPIRAL

Ever tried this one? Peeling away the skin in one piece so that you have one long, winding spiral? Start from the top and slowly circle your way round and round the orange until you... d'oh! Start over. Okay... start from the top and slowly circle your way round and round the orange until you... d'oh! Not again! Okay, start over from the top and slowly circle your way round and round the orange until you... doggone it! I give up! But you get the point. When YOU make it to the end, you'll have one long spiraling piece that you can wind around you wrist like a jewel, or put back together like Humpty Dumpty and punk your friends.

THE SMILE

For easy-to-eat orange "smiles," cut the fruit in half crosswise; then cut 3 or 4 wedges from each half, depending on the size of the orange. Slip it in your mouth, eat the fruit, slurp the juice, and say c-h-e-e-s-e!

THE SLITHER

Imagine your orange is a snake, and the peel is its skin... Navel oranges, and mandarins/tangerines peel easily if you insert your finger in an opening and slide back the peel. Some mandarins, like clementines, come off as easily as a snake slithers off its skin.

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CREATIVE WRITING.

How did the tangelo get its "knob"?

The orange family is big. Very BIG. Why is that? Well, there's so many hybrids - the offspring of two plants of different varieties, usually produced through human manipulation for specific genetic characteristics. So there have been thousands of combinations of oranges, mandarins, pomelos and other citrus fruit to make the family so big. (But big is a good thing, because the more of them there are, the better you can rest at night knowing all these heroes are on YOUR side, fighting for YOUR cause...).

So far we've only learned about 4 of the oranges out there: the valencias, navels, blood oranges and mandarins. But how many of you have seen the hero to the right? That's a TANGELO, a hybrid of the mandarin and the pomelo... and they are easily identified by the knob-like formation you see at the stem end.

But where did this knob come from? Is it like a door knob, where if you turn it, a magical door will open up? Or maybe it just means that the tangelo is just smarter than the other heroes because it has "extra" brain storage...

Use your imagination and write a story about how the tangelo got it's knob. Oh, and don't forget the tangelo is also a super hero, so go ahead and come up with a heroic name for him or her...

THE ?????? TANGELO

JUICY VALENCIAS

NEAT NAVELS

Thirsty Blood Oranges

Magnificent Mandarins

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THE OUTSTANDING ORANGES!

HOW TO PICK AN OUTSTANDING ONE.

What are the characteristics you should look for when selecting oranges at the grocery store? Circle the qualities you want to look for when picking out an ~OUTSTANDING~ one.

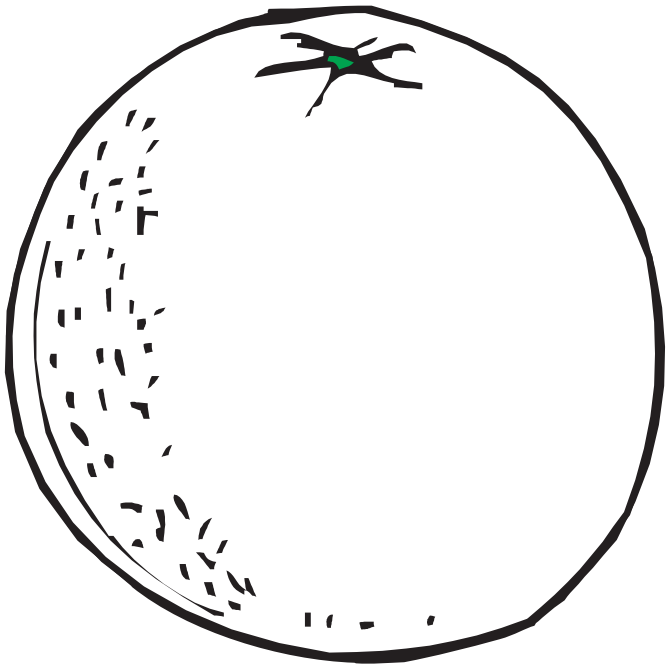
bright, colorful skin

surface scarring/brown streaks

skin color

Firm

spongy



skin smoothness

serious bruises

wrinkled

soft spots

skin thickness

heavy for their size

glossy skin

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THE OUTSTANDING ORANGES!

KEY

HOW TO PICK AN OUTSTANDING ONE.

What are the characteristics you should look for when selecting oranges at the grocery store? Circle the qualities you want to look for when picking out an ~OUTSTANDING~ one:

skin color isn't a good guide to quality: some are artificially colored; and valencia oranges can have green portions and still be ripe!

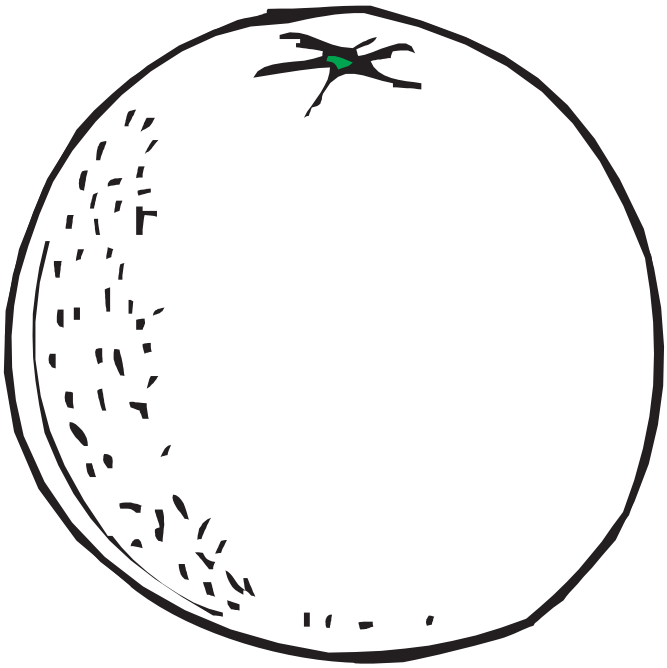
skin color

bright, colorful skin

these don't affect the quality... they occur when wind brushes young fruit against the tree

surface scarring/brown streaks

Firm



spongy

skin smoothness

serious bruises

wrinkled

soft spots

skin thickness

heavy for their size

glossy skin

thin skinned oranges will be juicier than thick skinned ones

these will be juiciest

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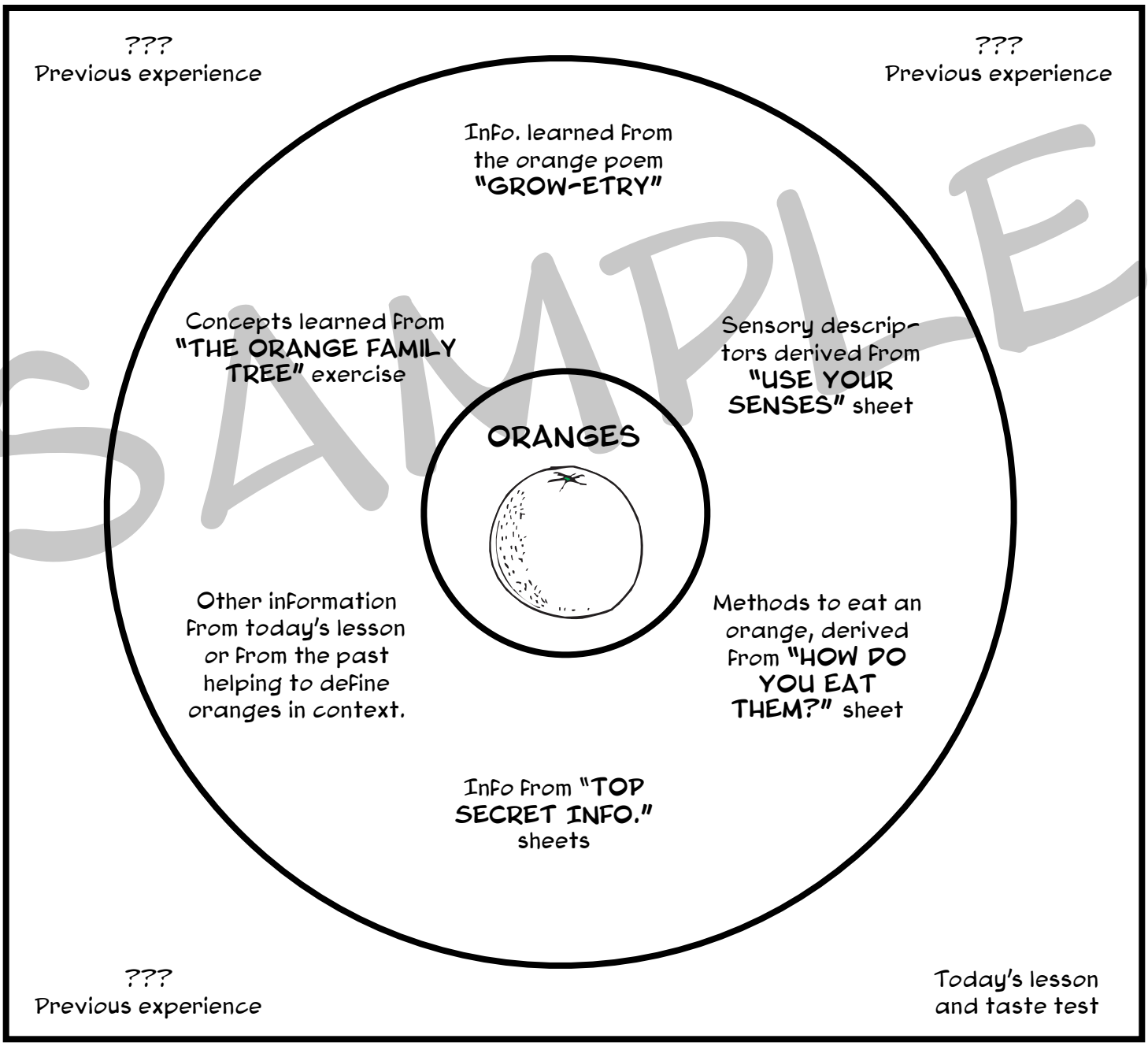
THE OUTSTANDING ORANGES!

CIRCLE MAP®

Possible ideas to include in the formation of a Circle Map® about oranges, depending of course on when the activity is done. The examples provided are obviously not exhaustive and are given to help illustrate and define oranges...



SAMPLE

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THE OUTSTANDING ORANGES!

MATH CONNECTIONS.

How does your orange measure up?

Estimate and measure your orange to discover the circumference, length, weight, and the number of seeds. (This activity can be used in conjunction with the Science Connections activity: "What's In Your Orange?").

CIRCUMFERENCE: HOW BIG AROUND IS IT?

Estimate: _____

Measured: _____

LENGTH: HOW LONG IS IT?

Estimate: _____

Measured: _____

SEEDS: HOW MANY ARE THERE?

Estimate: _____

Measured: _____

SECTIONS: HOW MANY?

Estimate: _____

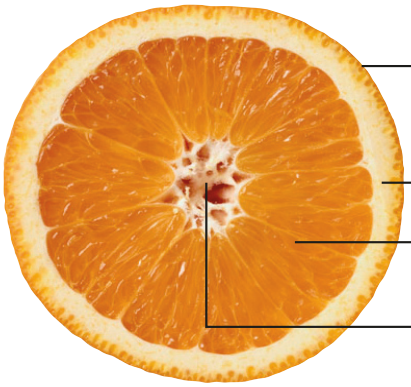
Measured: _____

JUICE: HOW MUCH?

Estimate: _____

Measured: _____

Here is a cross-section of an orange:



skin: flavedo layer with oil glands, which produce the citrus odor

rind: albedo layer

carpel: segments with juice sacs

core: placenta

Draw a cross-section of your orange. Label the skin, rind, carpel and core.

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THE OUTSTANDING ORANGES!

MATH CONNECTIONS.

ORANGES AND THE USRDA

USRDA = United States Recommended Dietary Allowance. These are the nutrient amounts considered to to be enough to meet the nutrition needs for just about all of us.

From the USRDA figures given below for one small orange, determine the percentage of the recommended daily allowance for your age group that is met by eating a small orange. After calculating these numbers, create a bar graph with the NUTRIENTS on the Y-axis (try increments of 5, from 0% to 100%), and the PERCENTAGES on the X-axis.

What do these numbers mean? (Usually 20% or greater indicates that it's a good source of this nutrient). What does it say about the strengths of oranges? What do they indicate about the importance of variety in your diet?

USRDA for Children of Different Ages

NUTRIENT	amount in one orange	4-8 years old	9-13 years old	14-18 years old	PERCENTAGE
Vitamin C	51 mg	25 mg	45 mg	75 mg	
Thiamin	0.11 mg	0.6 mg	0.9 mg	1.2 mg	
Riboflavin	0.05 mg	0.6 mg	0.9 mg	1.3 mg	
Niacin	0.37 mg	8 mg	12 mg	16 mg	
Calcium	52 mg	800 mg	1,300 mg	1,300 mg	
Folate	40 µg	200 µg	300 µg	400 µg	
Potassium †	237 mg	3,800 mg	4,500 mg	4,700 mg	
Fiber ‡	3 g	see note ‡	see note ‡	see note ‡	

† There do not exist USRDA's for potassium... therefore, AI, or "Adequate Intake" reference numbers have been used.

‡ For children up to age 18, the recommended daily dose (in grams) is determined by adding 5 to a child's age. For example, a 12 year old would require 17 grams of fiber in one day.

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SCIENCE CONNECTIONS.

SWEETER AT ONE END?

HYPOTHESIS:

Different parts of the same fruit can taste different.

Is this hypothesis true? To find out, perform the following experiment:

YOU NEED:

One orange (preferably navel)

WHAT TO DO:

1.) Peel the orange
2.) With a plastic knife, *carefully* cut across the stem end, and then across the blossom end.
3.) Taste the 2 ends.

OBSERVATIONS:

What did you notice about the taste? Is the hypothesis true? Record your observations.

Lesson from http://www.sunkist.com/kids/experiments/exp-orange.asp

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SCIENCE CONNECTIONS.

PREVENTING AN APPLE FROM TURNING BROWN.

HYPOTHESIS:

You can prevent a cut apple from turning brown.

Do you know the answer? Write your hypothesis and perform the experiment below to see if your hypothesis is true.

YOU NEED:

1.) One orange
2.) One apple
3.) Plate

WHAT TO DO:

1.) Working with a partner, cut the apple and the orange into quarters with a plastic knife. Now each student will have 2 quarters of each fruit.
2.) Squeeze orange juice over only 1 of the apple quarters.
3.) Check each of the quarters every few minutes.

OBSERVATIONS:

Which quarter turned brown first? Record your observations.

Lesson adapted from http://www.sunkist.com/kids/experiments/exp-orange.asp

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SCIENCE CONNECTIONS.

MAKE YOUR OWN "ORANGE SODA."

HYPOTHESIS:

Adding orange juice to baking soda will make orange soda.

Do you know the answer? Write your hypothesis and perform the experiment below to see if your hypothesis is true.

YOU NEED:

1.) 2 tsp of baking soda
2.) A glass of orange juice
3.) A glass of water

WHAT TO DO:

1.) Add 1 tsp of baking soda to the glass of water.
2.) Add 1 tsp of baking soda to the glass of orange juice.

OBSERVATIONS:

What happened? Is the hypothesis true? Record your observations.

Lesson adapted from http://www.sunkist.com/kids/experiments/exp-orange.asp

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THE OUTSTANDING ORANGES!

USE YOUR SENSES

		NAVEL	MANDARIN	BLOOD	TANGELO
	COLOR				
	SIZE				
	SHAPE				
	OTHER				
	FEEL OF SKIN				
	TEXTURE OF FLESH				
	TASTE				
	SMELL				

PERSUADE A FAMILY MEMBER ABOUT THE ORANGE YOU LIKED BEST, DESCRIBING THE LOOK, FEEL, TASTE AND SMELL:

_____

_____

_____

_____

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THE OUTSTANDING ORANGES!

SCIENCE CONNECTIONS.

WHAT'S IN YOUR ORANGE?

(This activity can be used in conjunction with the Math Connections activity: "How Does Your Orange Measure Up?")

HYPOTHESIS:

The larger the orange, the more seeds, sections, and juice it will have.

What is your hypothesis re: the size, weight, circumference and # of seeds? Write it down and investigate to see if your hypothesis is true.

YOU NEED:

1.) Oranges! (Ordered through your cafeteria manager, or you/your students can bring them from home, preferably of different sizes and seed content.)
2.) Plates
3.) Cups
4.) Plastic knives
5.) Scissors
6.) String
7.) Rulers
8.) Measuring device for liquids

WHAT TO DO:

1.) Estimate the circumference, length, # of seeds, # of sections, and tablespoons of juice in the orange.
2.) Measure the circumference by wrapping a string around the orange, cutting it, and then measuring it with a ruler.
3.) Measure the length as accurately as possible.
4.) Cut the orange down the middle half horizontally, (NOT vertically which would be end to end, stem to navel), counting the sections and seeds.
5.) Squeeze the juice out into the cup, removing the seeds and adding them to the total seed count. Using the liquid measuring device, record the amount of juice.

OBSERVATIONS:

If several types of oranges are used, make a comparison chart with the results from each of the types of oranges. Does the circumference of the orange have any relation to the number of sections? Does the number of seeds correspond to the number of sections?

Lesson adapted from www.sunkist.com/kids/pandt/teacher_manual.pdf

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THE OUTSTANDING ORANGES!

SCIENCE CONNECTIONS.

KEY

SWEETER AT ONE END?

The slice at the bottom of the orange (the blossom end) is sweeter.

Why? The blossom end develops more sugar because it is more exposed to the sun. For the same reason, fruits grown in the temperate zone are only 10 to 15 percent sugar while those from the tropics, such as bananas, figs and dates, range from 20 to 60 percent sugar.

The hypothesis is true!

PREVENTING AN APPLE FROM TURNING BROWN

Yes, you can prevent an apple from turning brown.

Why? When you cut into an apple, you tear its cells, releasing an enzyme called Polyphenoloxidase. The enzyme speeds up the process by which compounds in the apple (phenols) combine with oxygen from the air. This is what produces the brownish pigment that darkens the fruit and makes it taste bad.

The enzyme that turns the apple brown works more slowly at cold temperatures than at room temperature. It works even more slowly in an acid like orange juice or lemon juice, which completely inactivates it.

MAKE YOUR OWN ORANGE SODA

Nothing happens in the glass of water. In the glass with the orange juice, you get bubbles. You have made orange soda!

Why? Orange juice is an acid. When you add an acid to the baking soda, you free the carbon dioxide of the baking soda — the bubbly gas.

The hypothesis is true!

WHAT'S IN YOUR ORANGE?

Generally speaking, size is not a good indicator of the amount of juice. Navels are typically larger than valencias, but have less juice! Usually, small- to medium-sized fruits are sweeter than the largest oranges.

Thin skinned oranges (like valencias) are juicier than thick skinned ones (like navels). And while valencias do have more seeds than navels, seed count isn't always reflective of the amount of juice present in the orange.

In regards to weight, however, the heavier the orange, the juicier it will be.

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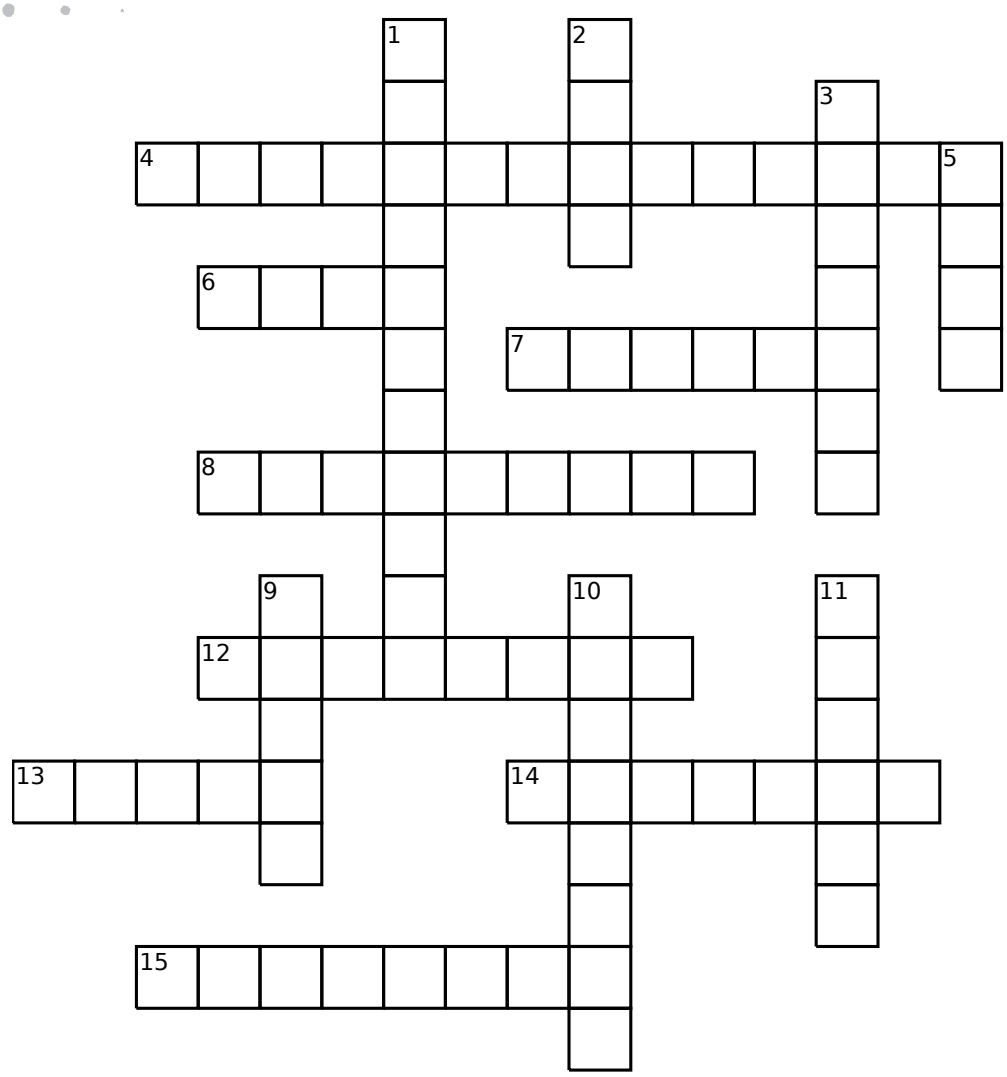
THE OUTSTANDING ORANGES!

LET'S REVIEW.

Using all the info you've learned about the "Outstanding Oranges," solve the puzzle:



ACROSS

4 These orange powers are actually plant chemicals which help "fight-o" diseases like cancer!
6 Another name for the peel.
7 This B vitamin has shown to play an important role in helping prevent birth defects.
8 A mineral necessary for your muscles, nerves, heart and kidneys to work properly.
12 We are known for all the juice that our round bodies can produce.
13 This is what a field of oranges is called.
14 A month when most oranges are at their peak.
15 We're real small, but one of the easiest oranges to peel.

DOWN

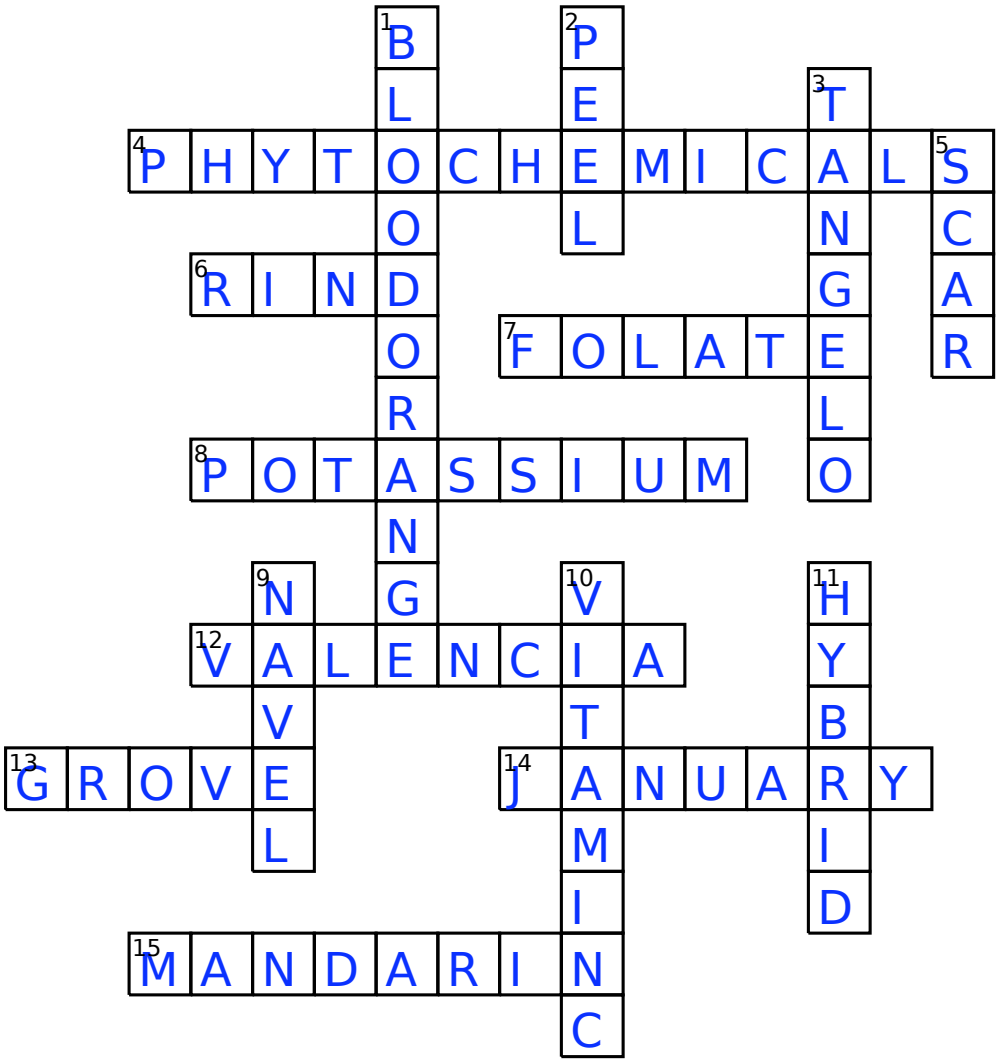
1 Squeeze us and it looks like we're actually bleeding.
2 The "basketball," the "spiral," and the "smile" are all ways to do this to an orange.
3 While known more for our knob, we're sweet, seedless and easy to peel.
5 This type of brown spots doesn't affect the quality... they occur when wind brushes young fruit against the tree.
9 We get our name because of our big "belly button" you see
10 During the California Gold Rush many miners and their families suffered from scurvy, a deficiency of this vitamin.
11 The offspring of the combination of two plants of different varieties.

THE OUTSTANDING ORANGES!

LET'S REVIEW.

KEY

Using all the info you've learned about the "Outstanding Oranges," solve the puzzle:



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THE OUTSTANDING ORANGES!

EVALUATION

Date: _____ # Students: _____ School: _____

Teacher Name (First & last): _____ Grade: _____

1. Which of the Tool Kit materials/activities were most useful? (Mark all that apply.):

☐ "Grow-etry" Poem ☐ Top Secret Info. ☐ KWL Chart ☐ Sweet Orange Family Tree
☐ Double Bubble Map® ☐ Flow Map® ☐ Creative Writing. ☐ How to Pick an Outstanding One
☐ Circle Map® ☐ Math Connections ☐ Science Connections ☐ Let's Review
☐ Use Your Senses

Comments/needs: _____

2. Please note how much time was spent on this lesson: _____

3. Did you find the Kit easy to use? ☐ Yes ☐ No

Why or why not? _____

4. Do the Activities get easily integrated into your existing curriculum?
☐ Yes ☐ No If not, how would you suggest they be modified?

_____

_____

5. What changes in your classroom have you made/will you make after participating in this month's Harvest?

_____

7. What changes, if any, do you notice in your students' outlooks in regards to fruits and vegetables?

_____

_____

8. You might do activities outside of what's provided in the kits, or perhaps you piggy-back on some materials to suit your needs. Whatever it is, we would love to know what your creative ideas are! Don't be surprised if you see your name on a future activity sheet!

_____

_____

DON'T FORGET!

Funding of this program requires 2 types of documentation:

1. EVALUATION
Submit this page to Nutrition Services, Attn: Cathy Kawakami as soon as possible. Call x7966 with questions.

2. TIME LOG
Submit every month. The next one is due **JANUARY 31ST.**

THANK YOU!

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