

Name: Matt Hawkins	Grade/subject: 2nd Lesson title: The Parts of a Plant	Arts integration area: Music Circle one Music , Dance, Drama & Visual Arts
Number of minutes: 60+ minutes		Date: 5/31/2011

STANDARDS/BENCHMARKS/GLCE addressed in this lesson:

- **L.OL.03.31** Describe the function of the following plant parts: flower, stem, root, and leaf.
- **S.IA.03.12** Share ideas about science through purposeful conversation in collaborative groups.
- **Music Standard 1** Singing alone and with others, a varied repertoire of music

OBJECTIVE *Through these learning activities, the student will demonstrate the ability to:*
Match the part of the plant to its specific part of the vegetable or fruit that can be eaten (root, stem, leave, fruit, seed). After the teachers read a plant book, sing a plant song, and discuss plants, the students will be able to complete the plant worksheet.

Time 15 mins	<p>ANTICIPATORY SET/INTRODUCTION</p> <ul style="list-style-type: none"> • Introduce the book “Tops and Bottoms” by Janet Stevens. Tell students that the book is about some of the plants that we eat. Ask them why the book is named “Tops and Bottoms.” • Show the cover and ask students to make predictions about what may happen in the book. • Read the book aloud to the class using the doc reader to display pictures to the students. • At the end, ask students what parts of each plant did the bear get? What parts did the hare get? • Ask them to name some other plants that they may eat at home. Ask them if they are the “tops” or the “bottoms.” Ask them if they can name a more specific plant part for that food.
40 mins	<p>INPUT</p> <p>Task Analysis</p> <ul style="list-style-type: none"> • Display the “Parts of the Plant” poster and introduce the names of the plant parts beginning with roots. Use “The Parts of the Plant” song to explain the function of each part and show that part on the poster • Ask the students what they may know about each and explain their functions using the poster as a guide. • Ask the students if they have ever eaten any of the vegetables or fruits from the book. Ask if they had thought about their food being a plant part.

- Introduce the stations that students will be visiting to complete their worksheet.
- Each station will include:
 - A picture of the plant
 - A paragraph description of the plant and the plant part that is food
 - An example of the plant part that is eaten (samples to eat if possible)
- Stations include:
 - Roots: carrot
 - Stem (stalk): celery
 - Leaves: romaine
 - Flower (seeds): corn
 - Fruit: tomato
- Worksheet is a matching activity. After visiting stations, students can connect lines between the plant part and the food that matches.
- Students will spend 3-4 minutes at each station (5 total) to read description and complete worksheet. (Additional music integration: music can be played in background while at stations, students change stations when music changes).

Thinking Levels: Evaluation, Analysis, Comprehension

Methods: Whole group reading and lesson plan. Work in pairs while examining stations.

INSTRUCTIONAL ACTIVITIES

Modeling/ Presenting Information: Classify the characteristics of fruits and vegetables. Distinguish the difference between fruits and vegetables. Apply this knowledge to the parts of a plant fruits and vegetables are from. Demonstrate the parts of a plant by using a labeled poster.

Check for Understanding: The student will infer what part of a plant an unfamiliar fruit is (rhubarb).

Guided Practice: Review what makes a fruit fall within its category and the same with a vegetable. Review how this can help determine what part of the plant a fruit or vegetable comes from.

Assessment: The successful student will use their new knowledge of the parts of a plant to fully match each vegetable and fruit at each station to the particular part of the plant it comes from. The worksheet will be completed by examining each station and discussing answers with their partner.

<p>5 Mins</p>	<p>CONCLUSION/CLOSURE:</p> <ul style="list-style-type: none"> • Sing one or two songs to review the parts of the plant. Songs include “The Parts of a Plant” sung to the tune of Wheels on the Bus, “Plant Part Song” sung to the tune of Farmer in the Dell, and “Do You Know the Parts of the Plants?” sung to the tune of the Muffin Man. • Song lyrics and chords for guitar are attached below • In between songs or verses, introduce additional fruits or vegetables to apply things learned during activity. Local, but less familiar vegetable (rhubarb) and fruit (cucumber) can be shown to class while clues are displayed on the doc reader. Ask students to share with a partner what they think, then with the class.
	<p>Reflection:</p> <ul style="list-style-type: none"> • Students may not be familiar with the fruits and vegetables that are presented. • Students may not know the tunes to the songs or sing out. • Not knowing the students, we may not create the best working groups for stations.
<p>RESOURCES NEEDED:</p> <ul style="list-style-type: none"> • The book, “Tops and Bottoms” • Vegetables (Carrots, Rhubarb, Celery) • Fruits (Cucumber, Tomato) • Seed (Corn) • Plant poster • Guitar • iPod 	<p>CLASSROOM SET UP</p> <ul style="list-style-type: none"> • During reading, the students will sit on the carpet with pillows • Stations will be set up in the four corners of the room • The iPod player will be set up at the front of the room

Name _____

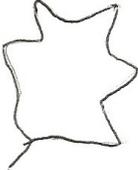
The Parts of a Plant

In the left column, draw and label the fruit or vegetable from each station.
Then draw a line across to match it to the part of the plant from where it comes.

Station 1 What am I? _____
Station 2 What am I? _____
Station 3 What am I? _____
Station 4 What am I? _____
Station 5 What am I? _____

Root 

Stem 

Leaf 

Fruit 

Seed 

The Parts of a Plant

("Wheels on the Bus")

(C)The roots on a plant grow underground,
(G)Underground, (C)underground.
(C)The roots on a plant grow underground.
(G)Roots are part of a (C)plant

The stems on a plant hold up the leaves,
Up the leaves, up the leaves.
The stems on a plant hold up the leaves.
Stems are part of a plant.

The leaves on a plant are making food,
Making food, making food.
The leaves on a plant are making food.
Leaves are part of a plant.

The flowers on a plant are growing seeds,
Growing seeds, growing seeds.
The flowers on a plant are growing seeds.
Seeds are part of a plant.

The Plant Part Song

(Sung to “The Farmer in the Dell”)

(C)The seed makes a plant.
The seed makes a plant.
(F)With soil and rain and (C)sunny days,
(G)The seed (C)makes a plant.

The roots find the water.
The roots find the water.
With soil and rain and sunny days,
The roots find the water.

The stem holds it up.
The stem holds it up
With soil and rain and sunny days,
The stem holds it up.

The leaves make the food.
The leaves make the food.
With soil and rain and sunny days,
The leaves make the food.

The flower makes the fruit.
The flower makes the fruit.
With soil and rain and sunny days,
The flower makes the fruit.

The fruit holds the seeds.
The fruit holds the seeds.
With soil and rain and sunny days,
The fruit holds the seeds.

The Parts of the Plant Song

(Sung to the tune of “The Muffin Man”)

(G)Oh, do you know the parts of plants,
(C)The parts of plants, (D)the parts of plants?
(G)Do you know the parts of plants
(C)That make them (D)grow and (G)grow?

The roots, they hold the plant in place,
The plant in place, the plant in place.
The roots they hold the plant in place
Soak up food and water, too.

The stem moves water up the plant,
Up the plant, up the plant.
The stem moves water up the plant
Brings water to the leaves.

The leaves soak up the rays of sun,
The rays of sun, the rays of sun.
The leaves soak up the rays of the sun,
And help the plant make food.

The flower grows into a fruit,
Into a fruit, into a fruit.
The flower grows into a fruit,
Which holds the tiny seeds.

Now you know the parts of plants,
The parts of plants, the parts of plants,
Now you know the parts of plants,
That make them grow and grow.

Roots, Stems, Leaves

by The Banana Slug String Band

CHORUS:

Roots, stems, leaves, flowers, fruits and seeds
That's six parts, six parts, six plant parts that people need.

The roots hold the plant in the ground,
They gather up the water that falls around.
And there's a root inside of me
Because a carrot is a root that I eat.
That's six parts, six parts, six plant parts that people need

A stem is an elevator growing up from the ground,
The water goes up and the sugar back down
And there's a stem inside of me
Because celery is a stem that I eat

The leaves are the kitchens where the food is done
They breathe the air and catch rays from the sun.
And there's a leaf inside of me
Because lettuce is a leaf that I eat.

CHORUS

The flowers are dressed so colorfully,
They hold the pollen and attract the bees.
And there's a flower inside of me
Because cauliflower is a flower I eat

The fruit gets ripe, then falls on down
It hold the seeds and feeds the ground.
And there's a fruit inside of me
Because an apple is a fruit that I eat.

CHORUS

The seeds get buried in the earth,
And the cycle starts again with a new plant's birth.
And there are seed inside of me
Because sunflower is a seed that I eat.

Now you know what this whole world needs,
It's roots, stems, leaves, flowers, fruits and seeds.
There's six plant parts inside of me
Because a garden salad is what I eat.

CHORUS

What am I?



→ The part that you eat grows underground

→ I am in charge of getting water from the soil

→ I am a favorite food of rabbits!

What am I?



- The part of me that you eat holds all of the plant together
- I am in charge of moving materials between the roots and leaves
- Sometime people add peanut butter or cream cheese to me for extra flavor

What am I?



- The part that you eat is very green
- The part that you eat catches the sun's energy to make food
- You usually add "dressing" when you eat me

What am I?



→ You can plant more of me from the part you eat

→ Lots of people eat me “on the cob”

→ Tell me a story....I have ears!

What am I?



- I have a lot of seeds in the part that you eat
- I hang from branches and grow from a flower
- I help make pizza sauce taste good!

What am I?



- ➔ The part of me that you eat holds all of the plant together
- ➔ I am in charge of moving materials between the roots and leaves
- ➔ I taste great in pies and cobblers!

What am I?



- ➔ The part that you eat has lots of seeds
- ➔ Did you notice my pretty yellow flower?
- ➔ I can be found on salads or in jars