



# Putting Up Fruit

## Upper Grades

### Core Curriculum Math:

#### Grade Level: 4-6<sup>th</sup> Grade

**Standard for Grade 5.** Fluently multiply multi-digit whole numbers using the standard algorithm.

#### CCR Anchor Standards for K-5 Reading- Integration of Knowledge and Ideas-

Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words

#### Writing Standard 2 -Write

informative/explanatory texts to examine a topic and convey ideas and information clearly.

#### Materials:

- Suggested book called *Sunset of a Farmer* by Beverly Wheeler Mastrim and Ethel Ohlin Bradford. This can be purchased at the farm or online at <http://sunsetofthefarmer.com/mailform.html>
- Jars or Cans of Fruit with Fresh Fruit to compare if you are going to do the science extension activity

**Objective:** Students will calculate the cost of putting up fruit by using skills of division and multiplication.

**Essential Questions: (Put these questions on the board and write a KWL chart to brainstorm students' ideas) What we know, and what we wonder?**

How was fruit preserved and why was it important to families during the late 1800's to early 1900?

Why is canning a lost art? Is it expensive to can fruit? How do you get other kinds of fruit if you can't grow it back then?

What is the science behind fruit being preserved and what makes it last so long?

### Background Information/Getting Ready: (Read this to your students)

*During the two months of August and September, women bottled fruit and vegetables that became a major part of the entire coming year's meals. It was a mammoth job, called 'putting up fruit.' The job had to be done in two tight months because that was when all the produce matured and was ready to be used. Women were of one mind in helping each other with this daunting task. It took a village to make sure that you were ready for the winter. Different foods called for various kinds of tools. Ethel states, "I had a large pressure cooker for non-acidic foods and meats, a dehydrator for both fruit and veggies, a juicer for grapes, a large pot to steam seven quart bottles at once, and crocks to cure the pickles. I recall, as a young woman, going down into Gram's cellar with her plethora of bottled fruit, crocks of pickles, and jars of grains, dry pastas, beans, rice and such and feeling as if I were entering a fairy land. No freezer, no matter how large and well-filled, can even come close."*

#### Independent Activity:

Students read this passage in groups of 2 and will understand about how much it cost to can fruit. They will then complete the attached worksheet to discover how many quart are a dozen and estimate the total costs. Students will do story problems from the passage. Have them work in pairs to determine how to solve the problems.

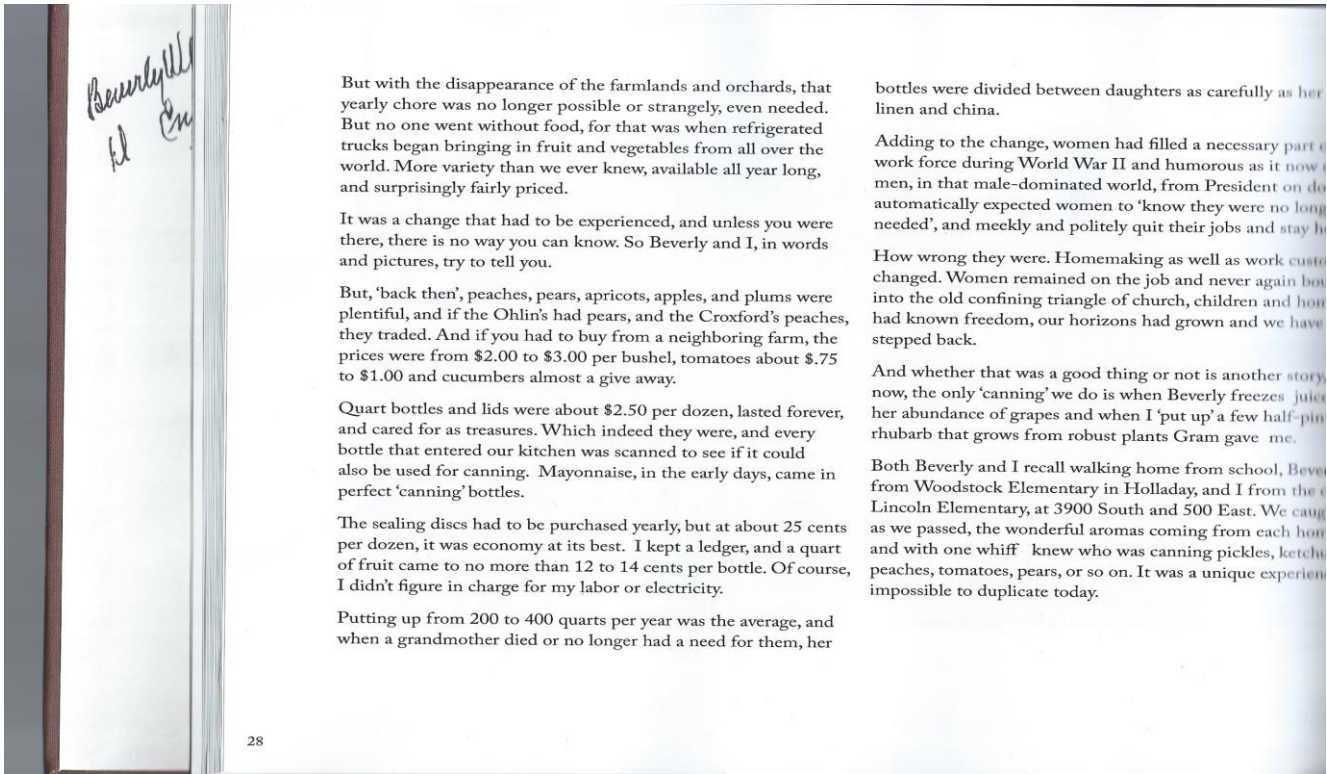
### Putting Up Fruit Math Activity Upper Grade Elem.

**\*Challenge on the back of this sheet, take turns writing a story problem for your partner and solve each other's word problem.**



<p><b>1.) If Beverly wanted to buy 12 tomatoes at .75 each how much would it cost her?</b></p>	<p><b>2.) If Ethel wants to make 400 quarts of preserved food to survive the winter, she we need to buy new sealing discs. Fortunately, she saved her jars from last year. How much money will she need if the sealing discs cost 12 cents per bottle?</b></p>
<p><b>3.)If Beverly buys 2 bushels of pear's from the Ohlins and 3 bushels of apricots approximately how much will she need to pay?</b></p>	<p><b>4.) Ethel broke her jars and lost the lids as well. She needs to make three dozen canned plums. Estimate how much will she pay total? Hint *go back to the passage to find out how much for jars, lids, the plums she grew herself.</b></p>

**Read this Story Prior to filling out the Math Worksheet**



But with the disappearance of the farmlands and orchards, that yearly chore was no longer possible or strangely, even needed. But no one went without food, for that was when refrigerated trucks began bringing in fruit and vegetables from all over the world. More variety than we ever knew, available all year long, and surprisingly fairly priced.

It was a change that had to be experienced, and unless you were there, there is no way you can know. So Beverly and I, in words and pictures, try to tell you.

But, 'back then', peaches, pears, apricots, apples, and plums were plentiful, and if the Ohlin's had pears, and the Croxford's peaches, they traded. And if you had to buy from a neighboring farm, the prices were from \$2.00 to \$3.00 per bushel, tomatoes about \$.75 to \$1.00 and cucumbers almost a give away.

Quart bottles and lids were about \$2.50 per dozen, lasted forever, and cared for as treasures. Which indeed they were, and every bottle that entered our kitchen was scanned to see if it could also be used for canning. Mayonnaise, in the early days, came in perfect 'canning' bottles.

The sealing discs had to be purchased yearly, but at about 25 cents per dozen, it was economy at its best. I kept a ledger, and a quart of fruit came to no more than 12 to 14 cents per bottle. Of course, I didn't figure in charge for my labor or electricity.

Putting up from 200 to 400 quarts per year was the average, and when a grandmother died or no longer had a need for them, her

bottles were divided between daughters as carefully as her linen and china.

Adding to the change, women had filled a necessary part of the work force during World War II and humorous as it now seems, men, in that male-dominated world, from President on down, automatically expected women to 'know they were no longer needed', and meekly and politely quit their jobs and stay home.

How wrong they were. Homemaking as well as work customs had changed. Women remained on the job and never again bowed into the old confining triangle of church, children and home. We had known freedom, our horizons had grown and we have stepped back.

And whether that was a good thing or not is another story. Now, the only 'canning' we do is when Beverly freezes juice from her abundance of grapes and when I 'put up' a few half-pint jars of rhubarb that grows from robust plants Gram gave me.

Both Beverly and I recall walking home from school, Beverly from Woodstock Elementary in Holladay, and I from the Lincoln Elementary, at 3900 South and 500 East. We caught up as we passed, the wonderful aromas coming from each home and with one whiff knew who was canning pickles, ketchup, peaches, tomatoes, pears, or so on. It was a unique experience impossible to duplicate today.

### Science Extension Activity:

#### Grade 6 Core: Standard 5

Students will understand that microorganisms range from simple to complex, are found almost everywhere, and are both helpful and harmful. Research and report on a microorganism's requirements (i.e., food, water, air, waste disposal, temperature of environment, reproduction).

### The Science Behind Canning:

The canning process locks in nutrients at their peak of freshness, and due to the lack of oxygen during the storage period, canned fruits and vegetables remain stable up until the time they are consumed. This means they have a longer shelf-life, which helps reduce waste from spoilage. Acid foods require heat processing to 212 degrees Fahrenheit to inactivate these tiny microorganisms. Different foods have various PH and may require more heat to neutralize the spoiling so pressure cookers are used for foods with less acidity.

What is the difference in canned fruits and veggies with fresh?

Materials:

- Peach, Apple, Apricot, Tomato, Cucumber (fresh)
- Peach, Apple, Apricot, Tomato, and Pickle (canned)

### Fresh or Canned I Eat It All

Name: \_\_\_\_\_

Introduction: In this activity you will compare different fruits that grow in different parts of Utah. Some are fresh and some are canned. What do you think the difference is, and do you see any patterns.

Directions:

- 1.) Look at the fruit/vegetable and record your observations in the table below
- 2.) Move from one fruit/Vegetable to another as your teacher directs. Look carefully at the shape, smell, feel of each canned or fresh fruit.

\_\_\_\_\_ **Fruit**

<b>Fresh or Canned</b>	<b>Color</b>	<b>Shape</b>	<b>Size</b>	<b>Taste or feels like</b>	<b>Unusual features</b>

\_\_\_\_\_ **Fruit**

<b>Fresh or Canned</b>	<b>Color</b>	<b>Shape</b>	<b>Size</b>	<b>Taste or feels like</b>	<b>Unusual features</b>

\_\_\_\_\_ **Vegetable**

<b>Fresh or Canned</b>	<b>Color</b>	<b>Shape</b>	<b>Size</b>	<b>Taste or feels like</b>	<b>Unusual features</b>

\_\_\_\_\_ **Fruit**

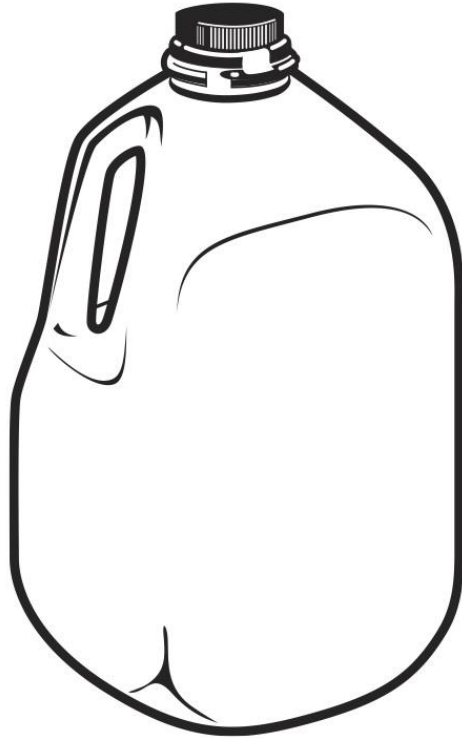
<b>Fresh or Canned</b>	<b>Color</b>	<b>Shape</b>	<b>Size</b>	<b>Taste or feels like</b>	<b>Unusual features</b>

Essential Questions to Answer after making your Observations:

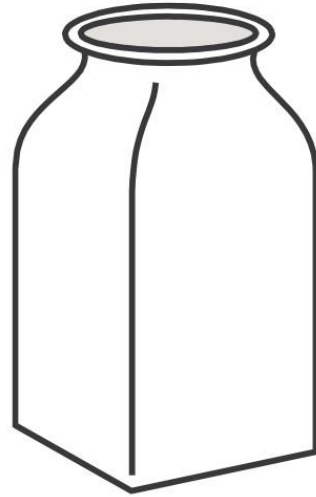
- 1.) What are the differences between canned food versus fresh?
- 2.) Do you see any patterns?
- 3.) What region in Utah do you think your fruit or vegetable grows best and why? ([www.agclassroom.org/ut](http://www.agclassroom.org/ut))
- 4.) How does canning help prevent the growth of bacteria in food?

*Wheeler Farm Friend*

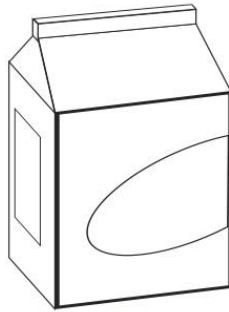
# Units of Capacity



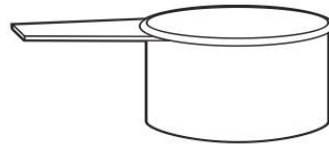
**Gallon**



**Quart**



**Pint**



**Cup**



**Tablespoon**



**Teaspoon**