



# Putting Up Fruit

## Lower Grades

**Time:** 60-minutes

### Core Curriculum Math:

- Mathematics – 2<sup>nd</sup> grade  
Standard 4. 3rd Grade  
Standard 4 Objective 1

**Grade Level:** 1-3rd

### 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>
- Copy worksheet of capacity to make animals on white cardstock and brads for moving parts, google eyes, and yarn, glue
- A jar of Jam and Bread for tasting after the activity. It also makes a nice display on the table.

**Objective:** Students will work in groups to identify shapes and convert units of measurement to make a capacity farm animal.

**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?

How much is a quart of fruit? What is the difference between capacity and measurement?

### 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 Bradford writes, "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."*

#### Guided Activity:

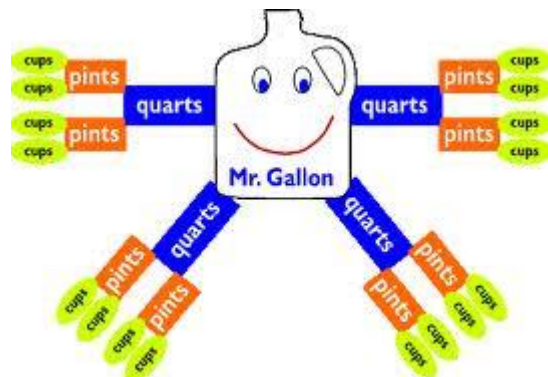
Students will discovery how much is a quart by making the gallon man. Teacher should draw the diagram and explain the capacity units of measurement using the examples below.

1 cup is equal to 8 fl oz

1 pint is equal to 2 cups

1 quart is equal to 2 pints

1 gallon is equal to 4 quarts



### Independent Activity:

Have the students design a farm animal using the attached worksheet. You may have made a capacity man in the past however it is fun to allow students to use their imagination in creating a capacity farm animal that shows how much is a quart. Make sure that their farm animal relates to the measurement. For example if the body of the animal is a quart then it either has to have 2 pints for a legs not 3. For grades 2<sup>nd</sup> and lower focus on the names of the shapes and the relationships between them. For 3<sup>rd</sup> grade students they need to make the animal to be mathematically correct see the rubric.

### Assessment For Capacity Farm Animals



3	2	1
<ul style="list-style-type: none"><li>• <b>Labeled the Farm Animal capacity parts such as quarts, gallon, cups, pint</b></li><li>• <b>Labeled the Shapes</b></li><li>• <b>Animal is mathematically correct showing capacity conversions</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Labeled some shapes and units of measurement</b></li><li>• <b>Farm Animals is partially mathematically correct</b></li></ul>	<ul style="list-style-type: none"><li>• <b>The animal is creative but lacks in showing knowledge of capacity units of measurement as well as shapes</b></li></ul>

**Comments:** \_\_\_\_\_

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**Extension:** Read Beverly and Ethel story from the Sunset of the Farmer about the cost of “Putting Up Fruit” Have the students compare this with the prices of today in a Venn diagram.



With no brothers, Beverly and Jean helped with all the chores until they were old enough to get jobs of their own, or married. One of Beverly's summer jobs was to take the cows, after the morning's milking, from the barn to the pasture, and again in the evening bring them back to the barn for the milking.

She also recalls that as she herded the cows down the then two-lane 900 East Street she was constantly embarrassed. The cows, from eating fresh green grasses, routinely dropped sloppy, wet manure on the street and even though there were few cars, what cars there were had to swerve to dodge the messes the cows left. Beverly reminds us that working on a dairy farm was not for the squeamish.

Only the uninitiated will wonder about the constant moving of the animals back and forth from pasture to barn, but anyone close to cows knows that the animals thrive on the green grass and clear water of the meadows, yet need the facilities of the barn for milking. In winter time the cows were kept in the barns.

After the milking, the milk was "separated," (cream from the milk), poured into sterilized milk bottles, capped and put in a cool cellar until time to deliver to homes before 5:00 a.m. in the morning.

Plenty of straw was tossed into each stall to give the cows a clean place for sleep, but eat and sleep wasn't all the cows did, for there was a constant 'outgo' too, and as a result the straw was fouled. Though the floor was built with good drainage, the first job,

morning or evening was cleaning up the stalls. The job was not a favorite one, but just something that had to be done.

Milking the cows was not a chore to be skipped one day and done twice the next day to catch up. The filled udders had to be emptied twice a day, and if left too long could become infected and the cow stop making milk. The cow would then be of no value, and as each animal was a big investment, everything possible was done to maintain its health. The demands were relentless.

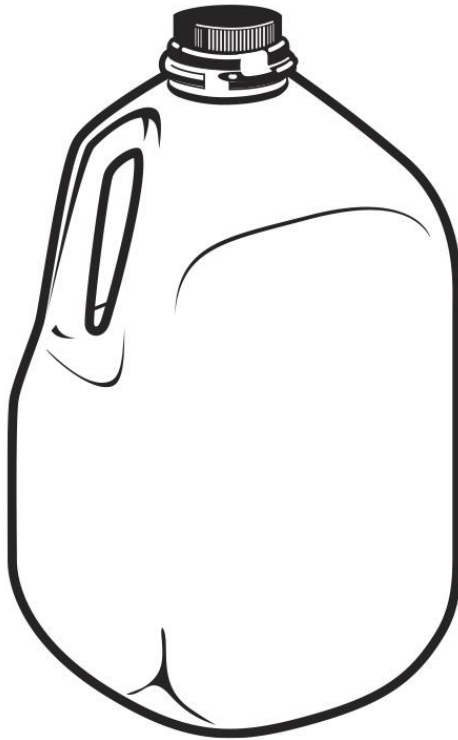
And though the family could take time off for picnics or visiting during the day, toward evening every man would finally say, "Well, we've got to get home to do the chores," and everyone knew that milking the cows was first on the list.

Thomas Wheeler had cows, but was not really a dairyman. He took the milk to a cool cellar, which was a room dug deep into the earth, with shelves for the milk pans. His wife then took over, and as the cream rose to the top of the pan, it was skimmed off and poured into a churn, and kept cool. When there was enough cream gathered, one of her children turned the handle until the sweet cream 'separated' and big gobs of golden butter appeared.

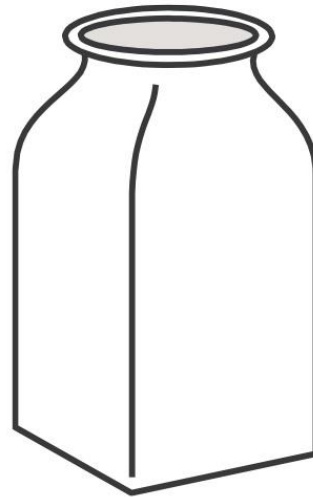
Beverly and I have each churned dozens of times, but then our mothers took over and 'worked' the butter with a wooden paddle, washed the golden mass under cold water to remove all buttermilk, added salt, and finally placed it in forms. The butter became firm as it cooled.



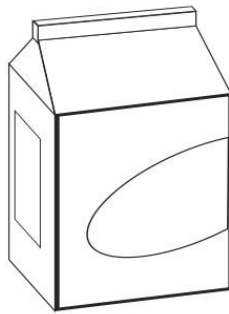
# Units of Capacity



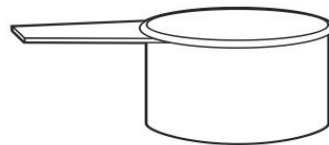
**Gallon**



**Quart**



**Pint**



**Cup**



**Tablespoon**



**Teaspoon**