



LESSON PLAN

Subject: Grade 4 Math

Lesson: In Pursuit of Most Popular Pots

Standard Addressed: Interpret a multiplication equation as a comparison. Multiply or divide to solve word problems involving multiplicative comparisons using models and equations with a symbol for the unknown number. (NC.4.OA.1)

Objective:

- Students will solve word problems and written equations with variables. The situations involve a multiplicative comparison.

Materials Needed:

- Device for showing *In Pursuit of Most Popular Pots* video
- “Most Popular Pots” activity sheet

Outline:

- Prior to the lesson students should know how to interpret a multiplication or division equation as a comparison.
- Show the 8:30 min video, *In Pursuit of Most Popular Pots*.
<https://youtu.be/eD8UtvKmQh8>
- Discuss the activity prompt and use Scenario 1 to model how to interpret the word problem as an equation, using a symbol as an unknown number. After modeling how to form the equation, encourage the students to solve the equation independently.
- Review the answers for Scenario 1.
- Students may complete the remaining scenarios independently or with a partner.

Take It Further: Students write and solve their own scenario for providing pottery for the town of Salem.

Cross-Curriculum Connection: (Included on page 2.)

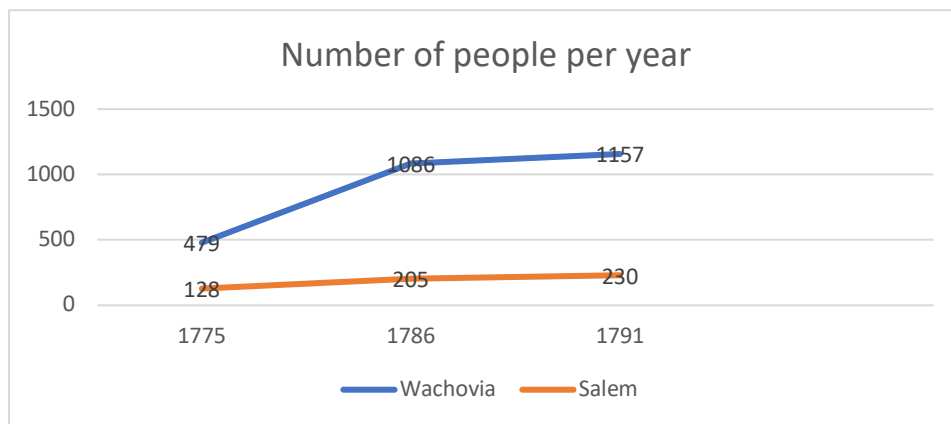


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Cross-Curriculum Connection:

The potter in Salem had to make enough pottery for everyone in the town of Salem and even everyone who lived in the whole Wachovia area. Here is some real data about how many people lived in Wachovia. Imagine how many pots the potter would need to make for all these people!

Year	The number of people in Wachovia	The number of people in Salem
1775	479	128
1786	1,086	205
1791	1,157	230



Imagine you are the master potter.

The year is 1786 and a lot more people have been moving into the area. How would you feel about all the pots you need to make? Should you hire helpers or use new tools? What would you do?

Write how the potter feels below.

IN PURSUIT OF MOST POPULAR POTS

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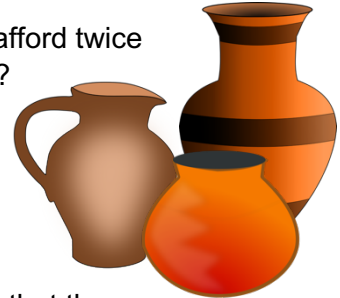
Name: _____

Date: _____

Activity 1: The farmer can afford to buy twelve new storage pots. The doctor can afford twice as many new pots as the farmer. How many new pots can the doctor afford to buy?

Show your equation:

Solve:



Activity 2: Last week the potter made enough pottery for nine customers. But now that the war has started, he will have three times as many customers next month. How many customers will the potter need to provide for next week?

Show your equation:

Solve:



Activity 3: The potter needs to fit forty-two pots into his oven. The oven is wide enough to fit six pots per row. How many rows of pots will the potter need to put in the oven?

Show your equation:

Solve:



Activity 4: The museum says that David Drake's pot can fit thirty gallons. That's five times larger than what most potters could make. How many gallons would a usual potter's work hold?

Show your equation:

Solve:





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ANSWER KEY

Activity 1: The farmer can afford to buy twelve new storage pots. The doctor can afford twice as many new pots as the farmer. How many new pots can the doctor afford to buy?

Show your equation: $12 \times 2 = ?$

Solve: $12 \times 2 = 24$ Pots

Activity 2: Last week the potter made enough pottery for nine customers. But now that the war has started, he will have three times as many customers next month. How many customers will the potter need to provide for next week?

Show your equation: $9 \times 3 = ?$

Solve: $9 \times 3 = 27$ Customers

Activity 3: The potter needs to fit forty-two pots into his oven. The oven is wide enough to fit six pots per row. How many rows of pots will the potter need to put in the oven?

Show your equation: $42 \div 6 = ?$

Solve: $42 \div 6 = 7$ Rows

Activity 4: The museum says that David Drake's pot can fit thirty gallons. That's five times larger than what most potters could make. How many gallons would a usual potter's work hold?

Show your equation: $5 \times ? = 30$ and $30 \div 5 = ?$

Solve: $30 \div 5 = 5$ Gallons

