LEARNING IN PLACE

LESSON PLAN

Subject: Grade 6 Math **Lesson:** In Pursuit of Most Popular Pots

Standard Addressed: Understand ratio concepts and use ratio reasoning to solve problems. (NC.6.RP)

Objective:

- Use ratio reasoning to solve real-world mathematical problems with equivalent whole-number ratios and with percentages.

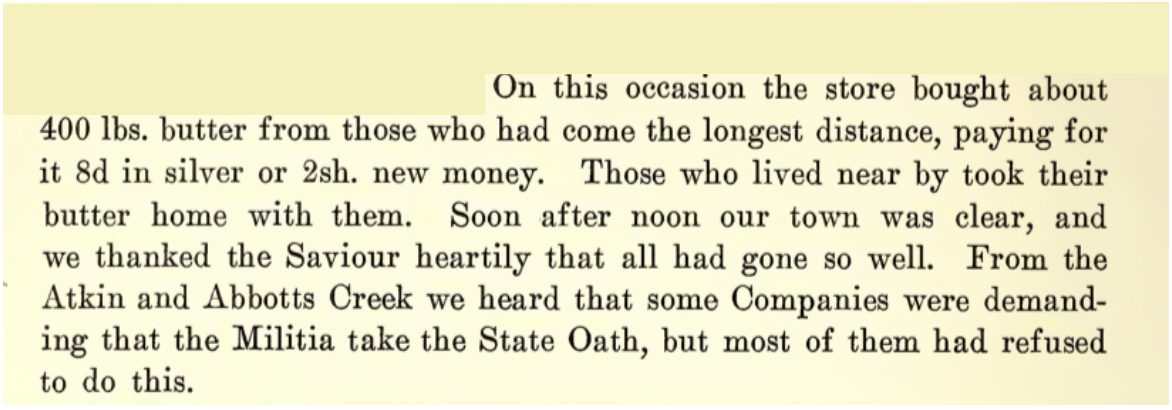
Materials Needed:

- Device for showing *In Pursuit of Most Popular Pots* video
- "Most Popular Pots" activity

Outline:

- Prior to the lesson students should know how to interpret a ratio word problem.
- 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 a ratio. After modeling how to form the ratio equation, encourage the students to solve the activity independently.
- Review the answers for Scenario 1.
- Students may complete the remaining scenarios independently or with a partner.

Take It Further: Share the following quote from the records about the day of the pottery shortage in Salem. "8d" stands for 8 English pounds and "2sh. new money" is referring to Continental money. Students will use this information to write and solve their own scenario for providing pottery for the town of Salem. Their scenario may include trades in English silver, Continental money, or in pounds of butter.



On this occasion the store bought about 400 lbs. butter from those who had come the longest distance, paying for it 8d in silver or 2sh. new money. Those who lived near by took their butter home with them. Soon after noon our town was clear, and we thanked the Saviour heartily that all had gone so well. From the Atkin and Abbotts Creek we heard that some Companies were demanding that the Militia take the State Oath, but most of them had refused to do this.

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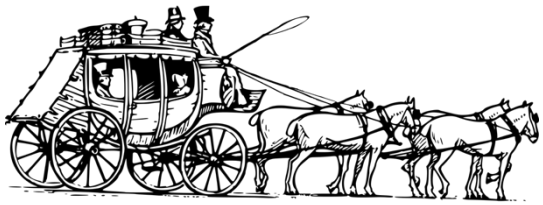
IN PURSUIT OF MOST POPULAR POTS

Grade 6 Math

Name: _____ **Date**: _____



Activity 1:

The potter has been selling 5 storage pots for 60 shillings. How much would the Doctor's family have to pay for 28 storage pots?

Show your work:

Answer:	

How much could they buy for 144 shillings?

Show your work:

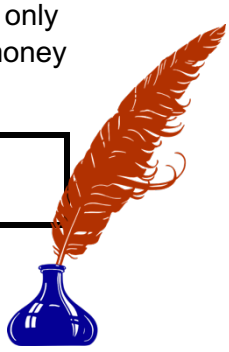
Answer:	

Activity 2:

8 shillings can buy a pickling jar, but now that war has started, the farmer's family only has continental dollars. If the ratio of shillings to continental dollars is 1 to 3, how much money would the farmer's family have to save up to buy a set of 6 pickling jars for their cellar?

Show your work:

Answer:	



How many jars could they buy with 216 continental dollars?

Show your work:

Answer:	

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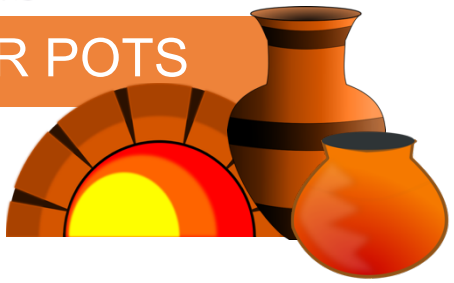


Grade 6 Math

Name: _____ **Date**: _____

Activity 3:

To get the town started, the potter used to make a ratio of 50 pots per family each year. But now the town has grown to 45 families. How many pots will the potter need to make this year?

Show your work:

Answer:	

How many families could he provide for if he is only able to make 3,000 pots a year?

Show your work:

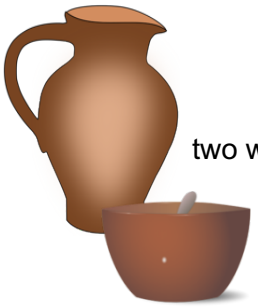
Answer:	

Activity 4:

The potter alone is able to make 20 pots a day. He works 5 days each week. How many pots can he produce in 6 weeks?

Show your work:

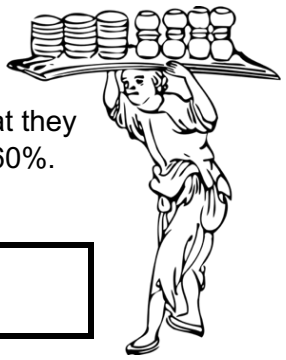
Answer:	



What if his demand jumps because of the war and people need to buy 300 pots every two weeks? Will he be able to meet that demand, or should he take on an apprentice?

Show your work:

Answer:	



Activity 5:

Before the war, people were purchasing 1,000 pots every six months. But now that they can't get their cheap pottery from England anymore, the demand for pots has increased 60%. Now how many pots will the potter have to provide for every six-month period?

Show your work:

Answer:	

IN PURSUIT OF MOST POPULAR POTS

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ANSWER KEY

Activity 1:

The potter has been selling 5 storage pots for 60 shillings. How much would the Doctor's family have to pay for 28 storage pots?

Show your work:

Answer:	**336 shillings**

How much could they buy for 144 shillings?

Show your work:

Answer:	**12 storage pots**

Activity 2:

8 shillings can buy a pickling jar, but now that war has started, the farmer's family only has continental dollars. If the ratio of shillings to continental dollars is 1 to 3, how much money would the farmer's family have to save up to buy a set of 6 pickling jars for their cellar?

Show your work:

Answer:	**144 continental dollars**

How many jars could they buy with 216 continental dollars?

Show your work:

Answer:	**9 jars**

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IN PURSUIT OF MOST POPULAR POTS

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ANSWER KEY

Activity 3:

To get the town started, the potter used to make a ratio of 50 pots per family each year. But now the town has grown to 45 families. How many pots will the potter need to make this year?

Show your work:

Answer:	**2,250 pots**

How many families could he provide for if he is only able to make 3,000 pots a year?

Show your work:

Answer:	**60 families**

Activity 4:

The potter alone is able to make 20 pots a day. He works 5 days each week. How many pots can he produce in 6 weeks?

Show your work:

Answer:	**600 pots**

What if his demand jumps because of the war and people need to buy 300 pots every two weeks? Will he be able to meet that demand, or should he take on an apprentice?

Show your work:

Answer:	**He will need an apprentice**

Activity 5:

Before the war, people were purchasing 1,000 pots every six months. But now that they can't get their cheap pottery from England anymore, the demand for pots has increased 60%. Now how many pots will the potter have to provide for every six-month period?

Show your work:

Answer:	**1,600 pots**