



Measuring at the Wedding

Goals:

Students will develop a deeper understanding of Matthew 25: 1-13 while sharpening English and Math skills

Objectives: Students will:

Solve real life problems involving the operations of addition, subtraction, multiplication, and division of whole numbers.

Convert units of measurement.

Read with fluidity, comprehension and appropriate voice.

Create text to self and text to world connections with the passage in Matthew 25

English and math standards included at the end

Materials Needed:

1. pencil and paper
2. Student handouts of problems, information, Reader's Theater
3. lamps and oil (dished and water may be substituted for less mess) A gallon size milk jug will work for the hin; a 12 ounce juice bottle can represent the log. Before class, pour ten ounces of water into the log sized container and mark plainly how much is 10 ounces.
4. Use a shallow bowl (small Styrofoam cereal bowls work well) for the lamp. Before class measure and pour 2 ounces of water in the bowl and mark plainly
5. Optional: "Lamps", "hins", "logs" and "oil" for each group.

Lesson Overview:

Students will use addition, subtraction, multiplication, and division to convert units of measure.

Introduction:

Pass the hin, log and "lamp" containers around for students to see approximately how large a quantity each is.

Read Matthew 25: 1-13 either from the Bible or using the Reader's Theater version or both. Have students respond orally or by journaling to one or more of the journal prompts.

Lesson Procedures:

Look over the chart together and connect the container with the measurement. Ask questions like "Where is the word 'hin' on the chart? How many ounces in a 'hin'?" "Which of these containers look like it would hold a 'hin'?" until teacher is sure all students understand how to read and use the chart.

Read problem one together. Select a pair of students to demonstrate the first problem in one as teacher or another student rereads the problem. This will show how a hin or gallon is measured and how it is divided into two equal parts.

Demonstrate the second half of problem one having a different pair of students pour from the hin into the log size container the number of times needed.

Assign students to groups to work on the next few problems together. Have students do at least 2 independently for teacher to assess independent skills and knowledge.

Optional: Have students in their groups use the containers to do the problems as well as figure them on paper to see the real life correlation. Then have each group “act out” one of the following problems for the class.(6,8,9 and/or 10) This will add manipulatives and a kinesthetic component that helps young learners grasp the concept of measurement as well as basic math operations..

Conclusion:

Summarize how smaller and larger units of measure are related, what math skills are needed to convert from one unit to another. Use journaling prompts orally or for writing assignments.

Assessment:

Teacher observation of students during reading, group work and during discussions
 Test- teacher made
 Student journaling

Optional Extension/Homework Assignment:

Do some research on daily life in ancient times. See research questions and additional internet resources.

STUDENT HANDOUTS

Oil Lamps

Oil lamps were made of clay and used by Hebrews and in Egypt well before the first century. They would illuminate the inside of the home as well as a 40 watt light bulb. Olive oil was common, inexpensive and most homes would contain several oil lamps. Some oils would give off sweet scents.

Ancient lamps were oval shaped, and flat on top with small bowls on one end. The other end would have been pinched tightly to form a groove that would hold the cotton or flax wick. Some of the lamps had a lid over the bowl.

Liquid measures in ancient times

Today we use gallons, quarts and pints for liquid measures. In Jesus day and before, other measures were used. Measurement was not as exact as it is today but for the purposes of the problems in this lesson use the chart below.

Log	Between a cup and a pint Approximately 10 oz
Hin	About a gallon (128 oz) or 4 quarts.
Bath	This was the largest liquid measure used by the Jews in the Old Testament. Its capacity was close to six gallons.
Lamp	Holds approximately 2 oz of oil.

**The Parable of the Ten Virgins
Reader's Theater**

CAST (12 with doubling possible)

Keturah, Kathleen, Katrina, Kadisha and Kiera (the wise)
Dorothy, Daniella, Dannah, Delphine and Dakota (the foolish)
Crier
Michael the Bridegroom

NARRATOR 1/DELPHINE: At that time the kingdom of heaven will be like ten virgins who took their lamps and went out to meet the bridegroom.

NARRATOR 2/KATHLEEN: Five of them were foolish and five of us were wise.

DANNAH: We foolish ones took our lamps but did not take any extra oil with us.

KETURAH: The wise, however, took oil in jars along with their lamps.

DOROTHY: The bridegroom was a long time in coming, and they all became drowsy and fell asleep. At midnight the cry rang out

CRIER: (*Shouting*) Here's the bridegroom! Come out to meet him!

KATRINA: We woke up and trimmed our lamps.

DAKOTA: (*To the wise*) Give us some of your oil; our lamps are going out.

KADISHA: There may not be enough for both us and you.

KIERA: Go to those who sell oil and buy some for yourselves.

DANIELLA: But while we were on our way to buy the oil, the bridegroom arrived. The wise ones who were ready went in with him to the wedding banquet.

KATHLEEN: And the door was shut. Later, the others arrived.

DELPHINE: Sir! Open the door for us!

MICHAEL the BRIDEGROOM: No! I tell you the truth, I don't know you.

KATRINA: Therefore keep watch, because you do not know the day or the hour.

The Word Problems!!!!

For the word problems: Keturah, Kathleen, Katrina, Kadisha and Kiera each brought a lamp holding 2 oz of oil and an additional container with extra oil. Keturah brought a blue jar containing half a hin of oil. The other 4 girls each brought small flasks containing a log of oil.

Dorothy, Daniella, Dannah, Delphine and Dakota each brought a lamp with 2 oz of oil. None of them brought extra oil.

A lamp with 2 oz of oil will burn approximately 4 hours.

The girls met at the Royal Fountain to wait for Michael, the bridegroom, at 8 pm – exactly when it started getting dark. Since none of them liked being in the dark and since they thought Michael would be a long sooner they all kept their lamps lit the whole time.

Problems one and 4 each show how the problem would be set up horizontally. As you solve, set each problem up either horizontally or vertically as your teacher directs. Show your work. Optional: Use a calculator to check your work

- 1) How many ounces of oil are in half a hin?

$$\underline{\hspace{2cm}} \text{ (number of ounces in a hin) } / 2 =$$

- 2) How many logs in a hin of oil? $128/10 =$

- 3) Including all flasks and jars, how many extra ounces of oil did the 5 wise girls bring?

- 4) If none of the girls brought extra oil, but the girls had only lit one lamp at a time, for how many hours could they have light?

- 5) If Keturah (who brought a blue jar containing half a hin of oil) had decided to fill each of the lamps of the girls who brought no extra oil, how much oil would she have had left in her blue jar after doing so?

$$(\frac{1}{2} \times 128) - (5 \times 2) =$$

- 6) If Keturah had decided to fill each of the lamps of all the girls waiting, how much oil would she have had left in her blue jar after doing so?

- 7) Perhaps Delphine would have suggested they conserve oil because Michael was known for being late. If only 2 girls kept their lamps lit at any one time, how long would the oil in the lamps have lasted?

- 8) How many lamps could Keturah have filled before the jar was empty?

- 9) Imagine Keturah had gone home at 9 pm taking her jar with her. When Michael arrived all the girls with extra oil refilled their lamps. How much oil remained in each of their flasks? How much extra oil was in all the flasks added together?

- 10) What is the fewest number of girls with extra oil that would have to share in order for the 5 who did not bring extra to have their lamps refilled?
- 11) If each girl needed enough oil for an entire night (8 hours) how many girls would have needed to bring an extra log of oil in their jar to supply everyone with all the oil they would need?
- 12) An oil merchant had wandered by at midnight. He offered to sell oil for six coins per log of oil. If each of the foolish girls had a coin would they have enough to buy all the oil they needed?
- 13) How much would it cost to buy a bath of oil?

Writing/journaling prompts

1. Share a time when you thought ahead and were prepared. What good came out of being prepared?
2. Share a time when you were not prepared? What happened? What would you do differently next time?
3. Pretend you are the bride or bridegroom and half the people you invited didn't show up to your wedding. How would you feel? What would you say to their excuse of running out of gas to get to the wedding?
4. Imagine taking a bath in oil. Would it be gross or fun? Use vivid words to describe how the bath would feel, smell, look and even taste or sound.

Optional Research questions

How did people in ancient times make oil for lighting their homes? From what was oil made? What were some other uses for oil?

Why would it be difficult to measure things without standard measurements? (You may want to read or use the following scriptures: Proverbs 16:11, 20:23

Lev. 19:36 Use honest scales and honest **weights**, an honest ephah and an honest hin. I am the LORD your God, who brought you out of Egypt.

Deut. 25: 13-16 Do not have two differing weights in your bag—one heavy, one light. Do not have two differing measures in your house—one large, one small. You must have accurate and honest weights and measures, so that you may live long in the land the LORD your God is giving you. For the LORD your God detests anyone who does these things, anyone who deals dishonestly.

Additional Internet Resources

<http://www.middletonbiblechurch.org/biblecus/biblec2.htm> charts of Biblical measurement with scripture references and questions.

<https://www.lds.org/scriptures/bd/weights-and-measures> a Biblical dictionary describes the changing nature and imprecision of Biblical weights and measures over a long period of time.

<http://www.bible-history.com/sketches/ancient/oil-vases.html> Short article on uses of oil and containers used for oil.

http://www.bible-history.com/ancient_oil_lamps/index.html Several pages about oil lamps including scriptural references.

Math Standard for Grades 3–5

Measurement

understand such attributes as length, area, weight, volume, and size of angle and select the appropriate type of unit for measuring each attribute;

- understand the need for measuring with standard units and become familiar with standard units in the customary and metric systems;
- carry out simple unit conversions, such as from centimeters to meters, within a system of measurement;
- understand that measurements are approximations and how differences in units affect precision

Problem solving

- build new mathematical knowledge through problem solving;
- solve problems that arise in mathematics and in other contexts;
- apply and adapt a variety of appropriate strategies to solve problems;
- monitor and reflect on the process of mathematical problem solving.

Number and operations

- understand the effects of multiplying and dividing whole numbers;
 - identify and use relationships between operations, such as division as the inverse of multiplication, to solve problems;
 - understand and use properties of operations, such as the distributive property of multiplication over addition
- develop fluency in adding, subtracting, multiplying, and dividing whole numbers; • develop and use strategies to estimate the results of whole-number computations and to judge the reasonableness of such results

Communication

- organize and consolidate their mathematical thinking through communication;
- communicate their mathematical thinking coherently and clearly to peers, teachers, and others;
- analyze and evaluate the mathematical thinking and strategies of others;
- use the language of mathematics to express mathematical ideas precisely.

English Standards for grades 3-5

1. Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment.
2. Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (e.g., philosophical, ethical, aesthetic) of human experience.
3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context)

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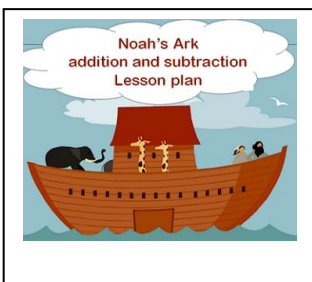
More royalty free Christian Drama skits can be found at my Fools for Christ website at foolsforchrist.net. Find interactive Bible games at <http://guest.portaportal.com/applebeebible>

4. Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
8. Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.
9. Students develop an understanding of and respect for diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.
11. Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.

ADDITIONAL PRODUCTS

FREEBIES: Novel study Power Points for *The Lion, Witch and Wardrobe*, *Magician's Nephew* and *The Horse and His Boy*. <http://www.foolsforchrist.net/novel-studies.html>

FREE LESSON PLANS: <http://www.foolsforchrist.net/lesson-plans.html> *Noah Subtraction*, *Build a Tower*, *Build a Budget* (Math), *Measuring at the Wedding* (science) and *Out of the Furnace* (Science) Take a walking field trip to find a good place to cool off. This lesson combines math (Basic operations and graphing), science (temperature and data collection) and the Fiery Furnace from Daniel 3. Extensions to the lesson bring in vocabulary and journaling. This lesson has adaptations to use with a mixed grade level class/differentiated learning.



READER'S THEATER SCRIPTS: Need a fun, fast way to make judicial proceedings come alive? Want students to be motivated to do cross curricular writing? Try this set of three scripts based on familiar childhood fairy tales that teach about the judicial system. The Three Bears vs. Goldilocks, Ms. Piggy vs. the Big Bad Wolf and Little Red Riding Hood vs. The Big Bad Wolf plus free interactive online game links are included as well as links to other online resources. <http://www.teacherspayteachers.com/Product/Readers-theater-scripts-The-Three-Bears-vs-Goldilocks-2-more-426542>

<http://www.teacherspayteachers.com/Product/Game-Water-cycle-weather-card-game-1012764> Weather and water cycle card game. Interactive fun to learn how weather and the water cycle work.