

Number and Units

Tuesday 10/21/08

Name:
Homeroom:
Mr. Z.'s Science Class
10/21/08

Do-Now: Bigger unit, smaller number

1. If something holds 6 pints, it might hold 3 what?
2. I make a pot of soup, and measure it out into bowls. One pot of soup fills 7 red bowls, **or** 11 green bowls, **or** 5 blue bowls. Rank the bowls in order of size, from smallest to largest.

Measurement practice: Tupperware

3. Looking at the two tupperware, which do you think is larger?
4. Think of two ways to prove it. After we have proven that we are right, write two sentences describing the two reasons that we know that one is larger.
 - a)
 - b)
5. The amount of water in a soda bottle is equal to _____ clear tupperwares. What do you know about the number of blue tupperwares it will be equal to?
6. The actual measurement was _____ blue tupperwares.
7. The amount of water in a soda bottle is equal to _____ green tupperwares. Where does the green tupperware fit in in terms of size?

Which is larger?

8. I know for sure that one measurement is larger than another if _____
9. If _____, the two may be equal.
10. For each of the following, circle the one that is larger, if one definitely is. If the two could be equal, circle "Could be equal".
 - a) 3 clear 5 green Could be equal
 - b) 6 blue 8 green Could be equal
 - c) 3 blue 2 clear Could be equal
 - d) 6 green 9 clear Could be equal

Number and Units Practice

Proving rank

1. I have a short, wide skillet and a tall, narrow stewpot. How could I find out which one holds more liquid?



Skillet



Stewpot

2. I have three buckets: A, B, and C. If I fill A and pour it into B and C, I can fill both and still have some water left in A. If I fill B, I can pour all of it into C and have some space left to fill.

Rank A, B, and C in order of size, from smallest to largest.

3. I fill a soda bottle and pour out into pink glasses. I find that I can fill 8 pink glasses from it. Then I refill the bottle, pour it out into purple glasses, and find that it also fills 8 purple glasses. What does this tell me about the glasses?

Working with number and units

4. A vat of molasses contains 4 hogsheads. That could also be measured as 3 puncheons or 6 barrels.

Rank the units **hogshead**, **puncheon**, and **barrel** in order from smallest to largest.

5. A yard is longer than a foot, and an ell is longer than a yard. If I am 2 yards tall, what can you tell me about my height when measured in feet? What about my height measured in ells?

6. If I fill up pitcher A and pour it into pitcher B, I can fill it completely and still have some left over in A. If it takes 25 As to fill my bathtub, what do I know about how many Bs it takes?