

Introduction to Division (Measurement model)

Related Virginia SOLs:

3.9 – recall of multiplication and division facts

3.10 – representation of multiplication and division problems; solving multiplication and division problems

March 3, 2009.

Objectives:

- Students will model division as repeated subtraction using unifix cubes

Procedure:

- 1) Warm-up – Subtraction – Mad Minute
- 2) Start off by asking students what multiplication is (repeated addition). Introduce division as repeated subtraction, and the inverse of multiplication.
- 3) Choose 1 student. Give the student 8 cubes. Each cube represents a piece of candy. You need to give out 2 pieces of candy at a time. How many people will get candy? Have them physically give out the cubes.
- 4) Discuss what happened
 - a. How many people got candy?
 - b. Tell students that they just did repeated subtraction by 2.
 - c. Ask students to explain how what just happened would be repeated subtraction.
- 5) Choose another student. Give the student 15 cubes. You need to give out 3 pieces of candy at a time. How many people will get candy?
 - a. How many people got candy?
 - b. Tell students that they just did repeated subtraction by 3.
 - c. Ask students to explain how what happened would be repeated subtraction
- 6) Give each student 20 cubes.
- 7) Have students practice with each of these $\rightarrow 20/5, 5/1, 12/4$.
 - a. Students must use the unifix cubes to model these problems. Teacher will circulate throughout the room to check models and provide help.
- 8) Reconvene as a whole class. Make connections with multiplication.
 - a. In multiplication, we start out with 2 factors to find out how much we have all together (how many groups and how many in each group)
 - b. In division, we start out with how much we have all together and try to find out what we had before
- 9) Review division as repeated subtraction