Name _____ Date _____

Cups and Cylinders

Homework

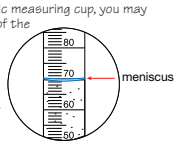
Dear Family Member:

In class we have been learning how to read scales to find the volume of a liquid and solving problems involving volume. Using the correct procedure and checking the scale on the measuring tool is important to finding the volume accurately.

At home you sometimes measure volume using a measuring cup with a scale on it. In school we have been using a scientific tool called the graduated cylinder. When you measure using a glass or plastic measuring cup, you may have noticed that the water creeps up the sides of the cup a small amount. This is called the meniscus. To get an accurate reading, you have to read the bottom of the meniscus.

Please help your child explain errors and correct procedure, then read the scales to solve problems in the following questions.

Thank you.



A graduated cylinder containing 69 cc

Reading a 2-Cup Measure

1. Look at the three pictures. Each of the three children is trying to read the water level in a 2-cup measuring cup. Explain the correct and incorrect methods you see.

Picture A

_____

_____

_____

_____

_____

Homework Master TG • Grade 2 • Unit 11 • Lesson 2 1

***Teacher Guide* - Page 1**

Name _____ Date _____

Picture B

_____

_____

_____

_____

_____

Picture C

_____

_____

_____

_____

_____

2 TG • Grade 2 • Unit 11 • Lesson 2 Homework Master

***Teacher Guide* - Page 2**

Teacher Guide

Cups and Cylinders (TG pp. 1–3)
Homework
Questions 1–2

1. Descriptions will vary. Some samples are given.

   Picture A: The cup is not level, so the water is at an angle. The reader is not at eye level with the meniscus of the water.

   Picture B: The reader is not at eye level with the meniscus of the water. The water in the cup is level.

   Picture C: This is a correct way to read the level in the 2-cup measure. The cup and water are level and the reader has his eyes at the meniscus of the water.

2. A. 74 cc

B. 55 cc

C. 120 cc

D. 65 cc; Possible number sentences:
$120 - 55 = 65$; $55 + 65 = 120$

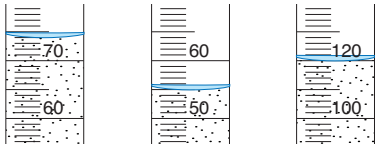
E. 126 cc; $74 + 52 = 126$

F. 83 cc; $120 - 37 = 83$

Name _____ Date _____

Volume Problems

2. Find the volume of water in the cylinders and solve the problems. Check the scale on each graduated cylinder. Then write the volume of the water in each. Remember to use labels.



A. _____ **B.** _____ **C.** _____

D. How much more water is in Cylinder C than Cylinder B?

Number sentence _____

E. Luis added 52 more cubic centimeters of water to Cylinder A. How much water is there now?

Number sentence _____

F. Luis poured 37 cubic centimeters of water out of Cylinder C. How much water is left in the cylinder?

Number sentence _____

***Teacher Guide* - Page 3**