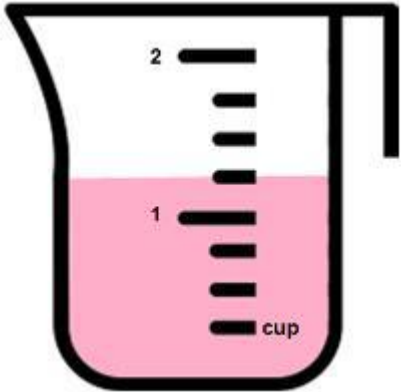




Measuring capacities, precision & errors

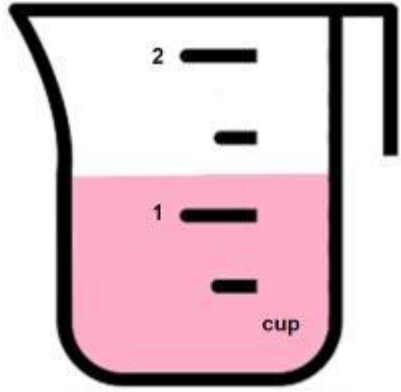
Grade 5 Measurement Worksheet

Cup A



How much liquid is there in the cup? _____

Cup B



How much liquid is there in the cup? _____

1. Which cup is more precise, A or B? Why?

2. Are your measurements exact? Explain.

3. William used water for an experiment project and wrote the capacity as 178 +/- 2 fluid ounces. Why do you think he wrote the measurement like that?

4. What do you think the minimum measurement of the water in the cylinder is?

5. What do you think the maximum measurement of the water in the cylinder is?



Answers

Cup A

How much liquid is there in the cup? $1 \frac{1}{4}$ cup

Cup B

How much liquid is there in the cup? Between 1 and $1 \frac{1}{2}$ cups

1. Which cup is more precise, A or B? Why?

Cup A is more precise because it has smaller divisions.

2. Are your measurements exact? Explain.

All physical measurements contain some uncertainty.

3. William used water for an experiment project and wrote the capacity as 178 ± 2 fluid ounces. Why do you think he wrote the measurement like that?

William knew that his measurement was not exact, and wanted to show that the capacity was between 176 and 180 fluid ounces.

4. What do you think the minimum measurement of the water in the cylinder is?

176 fluid ounces

5. What do you think the maximum measurement of the water in the cylinder is?

180 fluid ounces