

Meniscus & Parallax - Student Activity

Observing a Meniscus

Materials per group

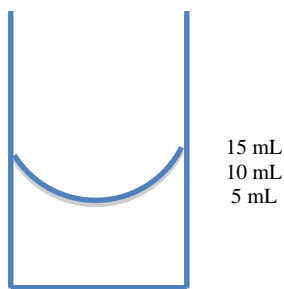
- Beaker
- Measuring cylinder
- Transfer pipette
- Water

Method

1. Half-fill a measuring cylinder with water.

Why is the surface of water in a container curved? _____

What do we call this curved surface? _____



The diagram above represents a measuring cylinder partly filled with water. Which part of the water's surface curve is used for measurement? _____

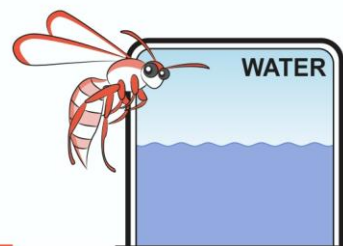
What is the volume of water in the measuring cylinder? _____

Accuracy and precision

Which piece of laboratory equipment would you use to accurately measure these volumes of liquid?

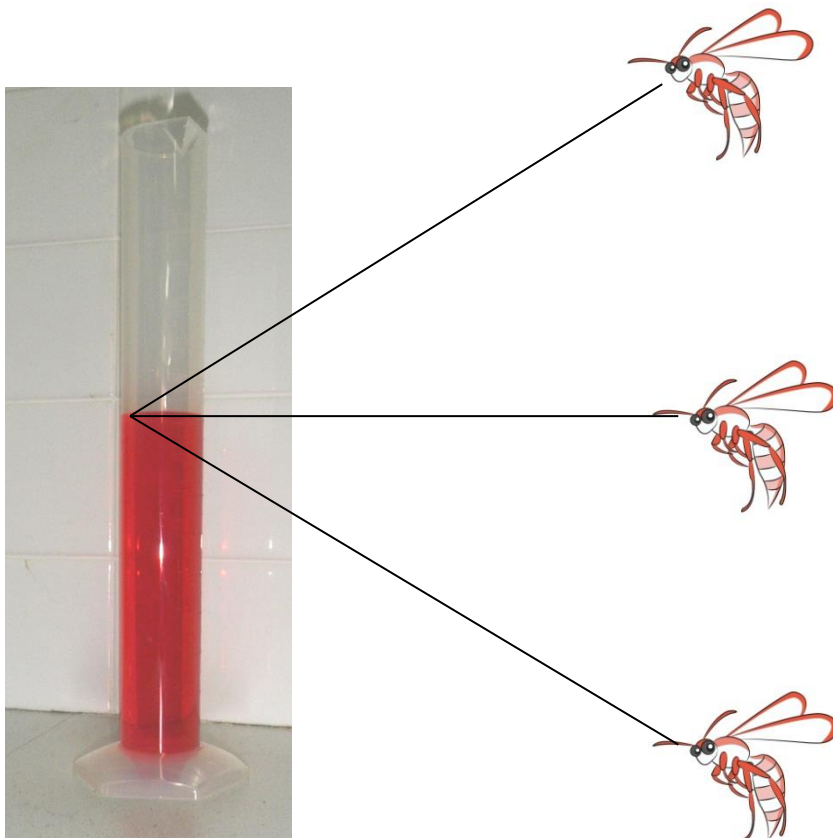
Volume (mL)	Pipette	Measuring cylinder	Beaker
5			
15			
50			
150			
500			

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Avoiding parallax (misreading) error

Which wasp will read the correct volume of water? _____



Using the equipment provided accurately measure these volumes of water:
Get a friend to check your readings

Volume	Equipment selected	Equipment selected	Checked
5mL			
10ml			
25mL			
100mL			
500mL			

What can lead to inaccuracies in reading volumes of water? _____
