

- 1. If you are given with a lot of values, and the question asks to find the best value. How would you select the best value?**

Answer. We would select the value that is repeated the most in the data OR take average of all the values. The average value would be the best value.

- 2. What is the formula of Average?**

Answer.  $\frac{\text{Sum of All Values}}{\text{number of values}}$

- 3. If the questions asks you that you have to use the same apparatus and get accurate results, what would you do?**

Answer. I will repeat the experiment multiple times and take the average at the end.

- 4. What is oscillation?**

Answer. 1 complete vibration of pendulum is called oscillation.

- 5. What is the Time period OR Period of a simple pendulum?**

Answer. The time pendulum takes to complete one oscillation.

- 6. If the question asks, how can you find the Time period of pendulum more accurately. What would you do?**

Answer. I shall let the pendulum oscillate for 20 vibration and find the total Time of all the vibrations. Then I shall divide the total time by the 20.

- 7. How would you find the length of a curved surface using a ruler?**

Answer. Take a thread, wrap it around the surface. Measure the length of the wrapped thread using a ruler.

- 8. What is the formula of area of rectangle?**

Answer. Area= Length  $\times$  Width

- 9. What is the formula of Volume of a rectangularly shaped object?**

Answer. Length  $\times$  Width  $\times$  Height

- 10. How can you find the Volume of a liquid?**

Answer. Put the liquid in a measuring cylinder. The marking ,until which the liquid has risen, is the volume of the liquid.

- 11. How can you find the volume of an irregularly shaped object?**

Answer. Put some water in the measuring cylinder. Record the volume of water. Now put the irregularly shaped object in it. The water level would rise. Record this new Volume. Now subtract the previous volume from the new one. The answer you get is the volume of irregularly shaped object. This method works only when the object completely sinks in water.

- 12. You wanted to find out the volume of irregularly shaped object, you put it in a cylinder having water. However, the object does not sink. How will you find the volume of this object?**

Answer. 1. Take some water in measuring cylinder and measure its volume. Lets call it V1

2. take something that sinks in water, e.g a stone. Put the stone in water and measure the volume of stone. Lets call it V2

3. Now tie the object with stone and now put in water. Now the object would sink. Find the total Volume now. Lets call it V3.

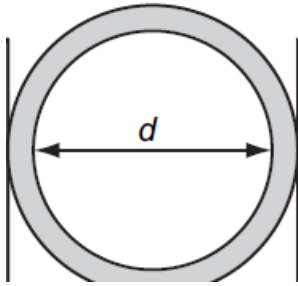
Volume of the object= V3 -V2-V1

- 13. How to measure the time from stopwatch?**

Answer. Subtract the previous time from current time. Follow this link to find how to subtract <https://www.splashlearn.com/math-vocabulary/time/subtracting-time>

- 14. What is diameter?**

Answer. The distance between two points on the circle is called diameter. The diameter always passes through the center of circle.

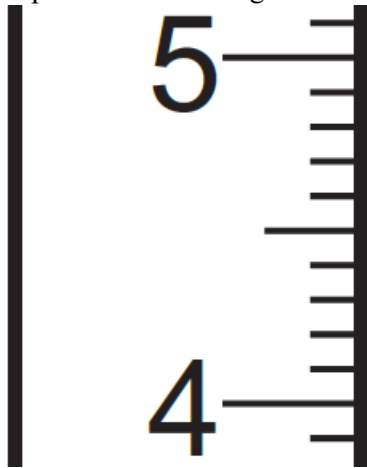


Here d is the diameter

15. In a question, you are asked to read a reading from a measuring tool. The value of bigger divisions are given but the values of smaller divisions not given. How would you find out the value of smaller divisions?

Answer. Value of small division =  $\frac{\text{Difference between any two big divisions}}{\text{number of small divisions between big divisions}}$

Example: look at the diagram below

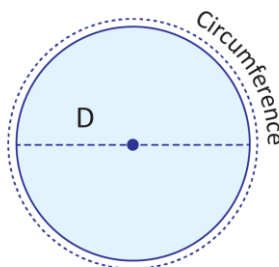


$$\text{Value of small division} = \frac{5-4}{10} = \frac{1}{10} = 0.1$$

So the values after 4 would be 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9

16. What is the circumference of a circle?

Answer. One complete distance around a circle is called circumference. In the diagram given below, dotted line distance shows the circumference.



**17. You are reading the volume from the measuring cylinder. How can you make sure that your reading is accurate?**

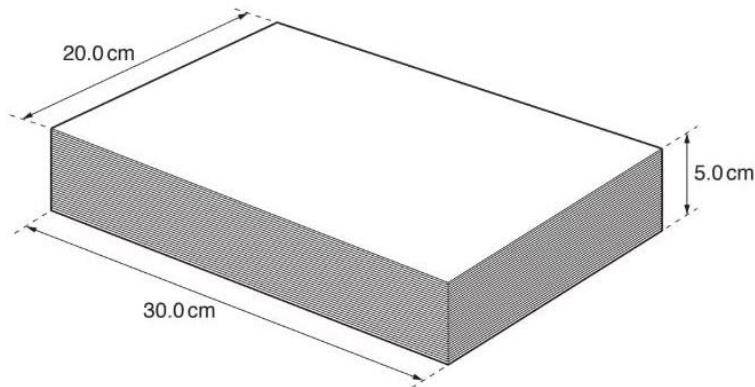
Answer. Read from the bottom of meniscus.

**18. You have two measuring cylinders. One of them has big markings on it, e.g Liters, and the other has smaller markings on it, e.g milli Liter. Which one of them would give you the accurate reading?**

Answer. The one with smaller markings on it.

**19. What is meant by thickness of paper?**

Answer. The height of a paper is called thickness of paper.



Suppose above picture shows a paper. Here the thickness is 5cm

**20. What if you are asked to find the thickness of one paper and thickness of complete book is given?**

Answer. Divide the total thickness by number of pages. You will get the thickness of single page. This method works only when the total thickness was given.

**21. What is reaction time?**

Answer. It is the time of delay for humans