

How do scientist use tools and stay safe?

Science tools: Page 281

) Tool: is an object used to do work.

) Tools can help you to:

- 1- Make observation. (Observe)
- 2- Do measurements. (Measure)
- 3- Collect data.
- 4- Record data.

) Tools can help you **measure volume, temperature, length, distance, mass and time.**

a- computer is a tool that can be used to:

- 1- Share observations with others.
- 2- Record data.
- 3- Find new information.

b- Camera is a tool used to **record data by taking pictures (photos).**

c- Binoculars are a tool that **helps you see things that are far away, and makes objects appear larger.**

The tool	Its measurements	Unit of measure
Graduated cylinder	Measure volume	Milliliters (ml)
Thermometer	Measure temperature	Celsius (° C) Fahrenheit (° F)
Clocks and stopwatches	Measure time	Hours Minutes seconds
Rulers/meter sticks	Measure length and distance	Meters (m) Centimeters (cm)
Balance	Measure objects' mass	Grams (g)
Microscope	Make objects appear larger Let you see more details	
Hand lens	Enlarge objects (to observe) But not as the microscope	
computer	Share+ record+ find data	
Camera	Record data by taking photos	
Binoculars	See far things	

Tools

) Tool: is an object used to do work.

Tools can help you:

1- Make observation.

2- Do measurements.

3- Collect data.

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Tools

) Tools can help you **measure volume, temperature, length, distance, mass and time.**

Computer: 1- Share observations. 2- Record data. 3- Find new information.

Camera: - record data by taking pictures (photos).

Tools

Binoculars: 1- to see things that are far away. 2- Makes objects appear larger.

Graduated cylinder	Measure volume	Unit: Milliliters (ml)
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Balance	Measure objects' mass	Grams (g)
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Thermometer

Measure temperature

Celsius (° C)

Fahrenheit (° F)

Clocks and stopwatches

Measure time

Hours, Minutes, seconds

Rulers/meter sticks

Measure length and distance

Meters (m), Centimeters (cm)

Tools

Microscope	Make objects appear larger	Lets you see more details
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Hand lens	Enlarge objects (to observe)	But not as the microscope
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Decide if the sentences (about tools) below are **true or false**. And put a line under the wrong phrase.

1. Binoculars make things appear larger and let see more details. [_____]
 2. Computer can be used to record data by taking pictures. [_____]
 3. Computers can be used to share observation with others. [_____]
 4. Tools can't help you to collect data and record it. [_____]
 5. You can measure an object's mass with microscope. [_____]
 6. You can see more details by using hand lens. [_____]
 7. You can measure volume by using thermometer. [_____]
 8. You can measure temperature by using graduated cylinder. [_____]
 9. Meter is the unit of volume. [_____]
 10. Milliliter is the unit of length and distance. [_____]
 11. Celsius and Fahrenheit are the units of temperature. [_____]
 12. (Grams) is the unit of mass. [_____]
 13. ml is the unit of volume. [_____]
 14. cm is a short-cut for centiliters. [_____]
 15. Watches and stopwatches can measure time. [_____]
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Choose the correct word from the box below to complete the following sentences.

Microscope/ graduated cylinder/ grams/ length/ temperature/ milliliters / millimeters

1. Thermometer measures _____.
2. You can measure _____ by using Rulers.
3. You can measure volume by using _____.
4. The measurement unit of mass is _____.
5. The unit of volume is _____.
6. _____ let you see more details and enlarge objects.

Observations/ hours/ meters/minutes/ centimeters/ enlarge/ data/ measurements/ information/
microscope/ seconds

1. The units of length and distance are _____ and _____.
2. The units of time are _____, _____ and _____.
3. Hand lens can _____ object but not as the _____.
4. Tools can help you to make _____ and do _____.
5. Computers are used to find _____, record _____ and other things.