

# Scientific Tools

# Balance



## Definition:

1. device used to measure mass; it works by balancing an "unknown" with a standard mass that is known
2. a state of equilibrium, as in an ecosystem.

## Unit of Measurement: Grams (g)

## Use in a Sentence:

1. What is the mass of the beaker shown on the balance?
2. How will the introduction of a new predator affect the balance of organisms in the forest ecosystem?

# Devices



## Definition:

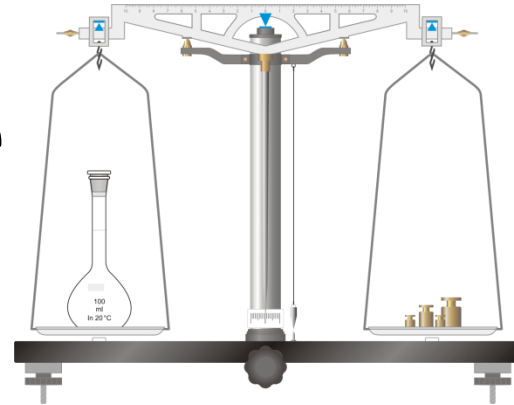
pieces of equipment or mechanisms designed to serve special purposes

Unit of Measurement: Depends on Device

## Use in a Sentence:

Identify a device for measuring the weight of an object.

# Equal Arm Balance



## Definition:

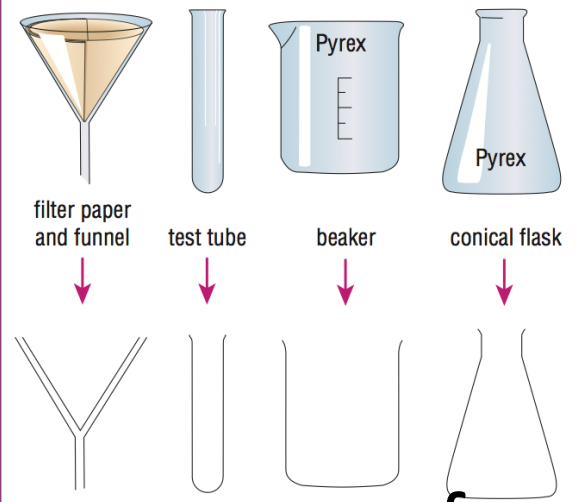
an instrument for determining weight, typically by the equilibrium of a bar with a fulcrum

Unit of Measurement: Grams (g)

## Use in a Sentence:

Use the equal arm balance to determine the mass of the object.

# Equipment

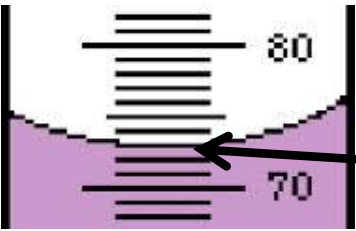


## Definition:

the clothes, machines, tools etc. necessary for a particular kind of work or activity

## Use in a Sentence:

Name two pieces of equipment that would be necessary to conduct the experiment above.



# Graduated Cylinder

Measure  
here

Definition:

a tall narrow container with a volume scale used especially for measuring liquids

Unit of Measurement: Milliliter (mL)

Use in a Sentence:

Record the volume shown in the graduated cylinder above.



# Hand Lens or Magnifier



## Definition:

a lens that makes the item seen through it look larger; magnifying glass

## Use in a Sentence:

Use the hand lens to make observations of the penny.

Use the magnifier to identify the external features.

# Microscope



## Definition:

a science tool that uses lenses to make tiny things look larger so they can be observed

## Use in a Sentence:

How did the invention of the microscope help doctors in their fight against communicable diseases?



# Spring Scale



Definition:

a balance that measure weight by the tension on a helical spring

Unit of Measurement: Newtons (N), Grams (g)

Use in a Sentence:

A spring scale depends upon the force of gravity acting upon the object being weighed.