

Cell Theory**Station 1: Lab Equipment**

Using the provided equipment on the table, match the equipment with the names below:

- | | |
|---------------------------|-----------------------------|
| _____ 1. Beaker | _____ 8. Graduated cylinder |
| _____ 2. Thermometer | _____ 9. Eyedropper |
| _____ 3. Erlenmeyer flask | _____ 10. Safety glasses |
| _____ 4. Hot Plate | _____ 11. Bunsen burner |
| _____ 5. Test Tube | _____ 12. Scoopula |
| _____ 6. Test tube rack | _____ 13. Stir rod |
| _____ 7. Scale | _____ 14. Funnel |

Name the piece of equipment that is used...

- _____ 1. To protect your eyes.
- _____ 2. To measure the temperature of a liquid.
- _____ 3. For approximate measurement of a liquid.
- _____ 4. For more accurate measurement of a liquid.
- _____ 5. To measure the mass of a substance.
- _____ 6. To hold a test tube.
- _____ 7. To transfer small amounts of liquid from one container to another.
- _____ 8. To stir liquids.
- _____ 9. To scoop solids.
- _____ 10. To transfer liquids into a container with a small opening.

Station 2: Making Observations

Define and give an example for each of the following:

➤ Qualitative observation:

○ Example:

➤ Quantitative observation:

○ Example:

○ Instruments we can use:

At the table there are three objects. Make 2 qualitative observations and 2 quantitative observations for each of the objects. Complete the chart.

OBJECT	Qualitative observation	Quantitative observation
A	1. 2.	1. 2.
B	1. 2.	1. 2.
C	1. 2.	1. 2.

Station 3: Characteristics of living things and Biological Drawings

List the seven characteristics of living things:

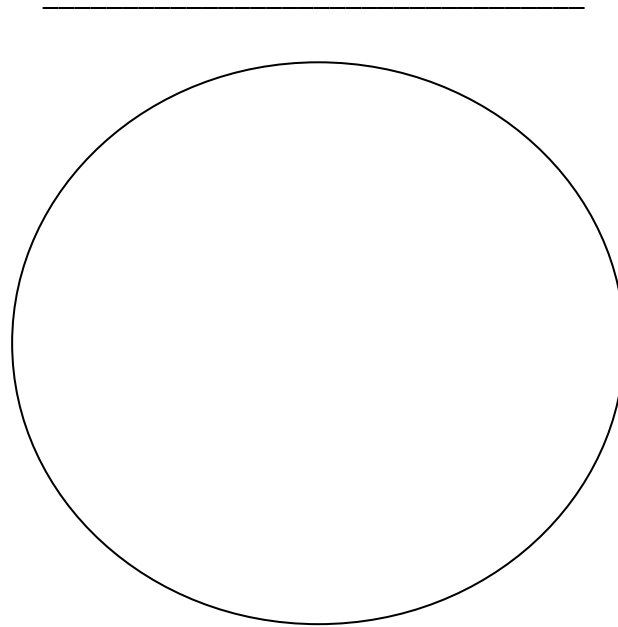
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Select **THREE** different living objects in the picture below and choose one (or more) living characteristics that you observe.



Object:	Exhibited Characteristic(s)
1.	
2.	
3.	

Draw a detailed biological diagram of your sample and include a title, labels and magnification used.



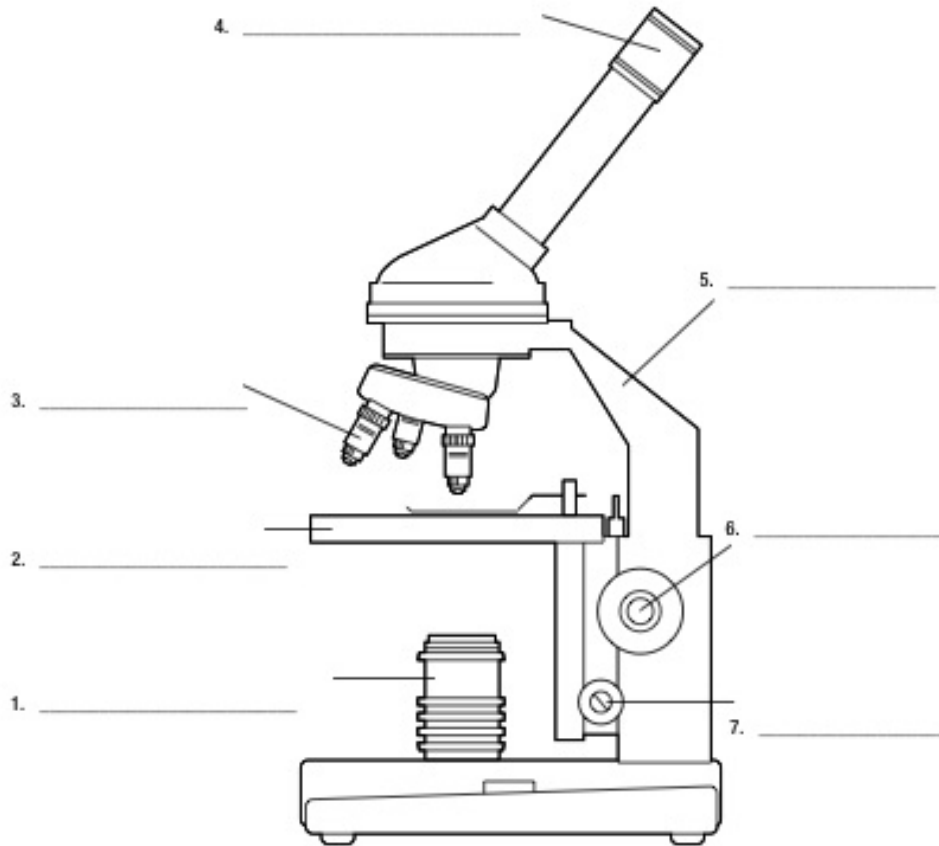
Total magnification: _____x

Match the function with the microscope part.

Function	Microscope part
___ 1. holds the slide in place	(a) objective lens
___ 2. lens closest to the eye	(b) eyepiece
___ 3. supplies the light needed to view the object	(c) revolving nosepiece
___ 4. allows you to switch magnifications	(d) coarse focus knob
___ 5. magnifies the object	(e) stage clips
___ 6. supports the microscope slides	(f) fine focus knob
___ 7. used for focussing at low power	(g) light source
___ 8. used for focussing at high power	(h) stage

Station 4: Summary Questions

Label the following diagram:



1. If you are using a **medium** power objective lens, what is the total magnification of the specimen?

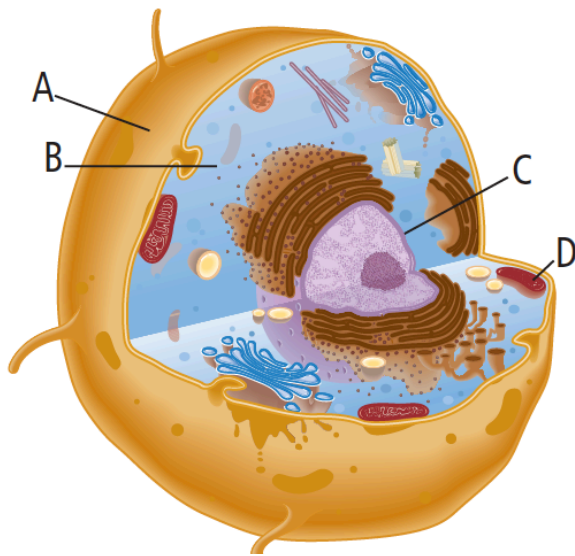
2. For a correct microscope diagram, identify whether the following statements are **true** or **false**:

- _____ The diagram can be drawn in pen
- _____ The diagram must include detail
- _____ Lines do not have to be drawn with a ruler
- _____ The labeling lines must be horizontal
- _____ Writing can be in the diagram circle
- _____ A title must be included
- _____ The magnification is irrelevant to the diagram

3. Complete the table with the function of the organelle:

Organelle	Function
Cell membrane	
Lysosome	
Nucleus	
Mitochondria	
Cytoplasm	
Golgi body	

4. Label the following animal cell diagram:



A:

B:

C:

D: