

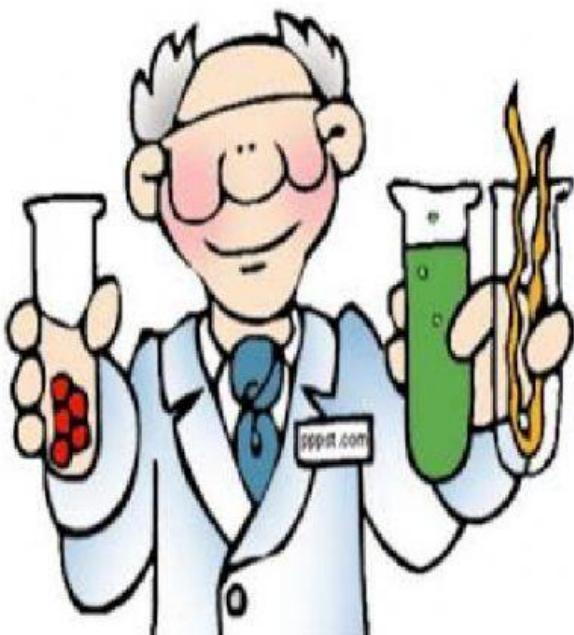


SCIENCE

CHAPTER 6 -MATTER AND ITS CHANGES

LESSON 1 – DESCRIBING MATTER

Properties of Matter



Created by- Nisha Tanwar

MATTER

Matter is everything.
Matter has mass and takes
up space.

SOLIDS

- It has definite shape
- It has definite volume

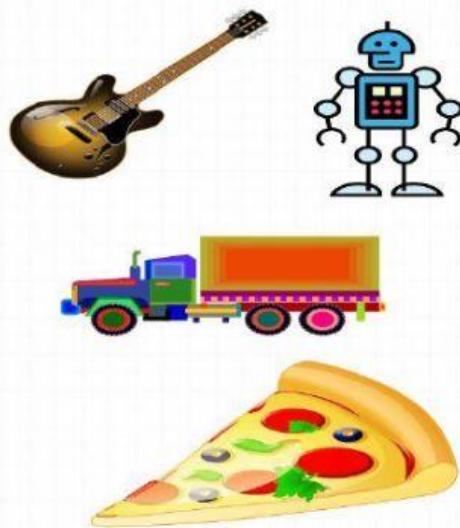
LIQUIDS

- It has no definite shape
- It has definite volume

GAS

- It has no definite shape
- It has no definite volume

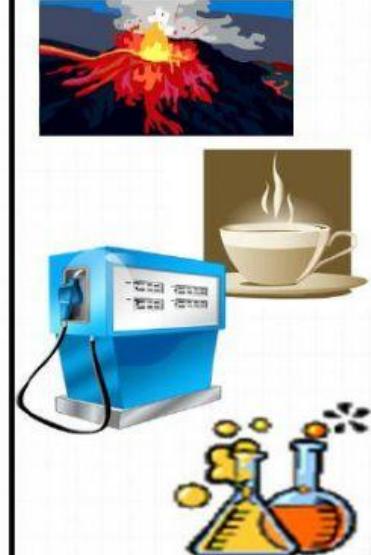
Solids



Liquids



Gases



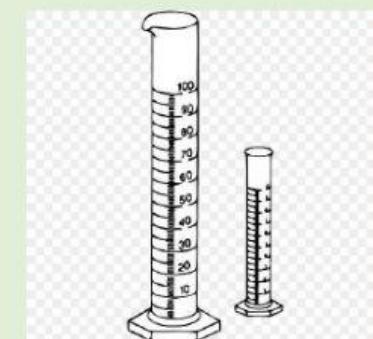
Mass- Amount of matter in any object.

Mass is the amount of matter making up an object. Mass is often measured in units called *grams* or *kilograms*. To measure mass, you use a tool called a *balance* (BA•luns).



Volume- Amount of space an object takes up.

Volume is how much space an object takes up. We measure volume by counting the number of cubic units in an object. We can also measure volume with tools like graduated cylinders.



PROPERTIES OF MATTER

Magnetism: ability of matter to attract certain metal objects.



Buoyancy :

Buoyancy (BOY•uh•see) is a property that helps us build boats. **Buoyancy** is the upward force of a liquid or gas on an object. All objects are buoyant. Some objects are so buoyant that they float.



Some objects can float in water. Other objects sink.



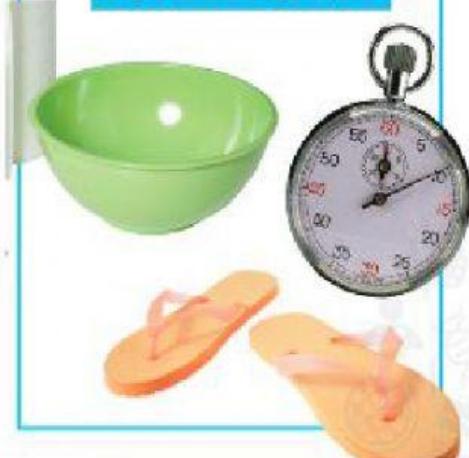
Solubility :

ability of matter to dissolve in a liquid. When a substance *dissolves*, it blends in and seems to *disappear*. Sugar and salt will dissolve in water. Sand will not.



Uses of Matter

Objects Made by People



Objects in Nature



What happens to the matter we use?

You use matter all the time. The food you eat is matter. Your chair is matter. You even breathe matter!

Some matter, like air, can be used again and again. Other forms of matter get thrown away. Too often, matter becomes trash. It goes into landfills or oceans.

Many people choose to **reuse** matter. This is when you use something again instead of throwing it away. An egg carton can be used to plant seeds. Are there other uses for things you throw away?

Matter can also be **recycled**, or made into something else. Cans, paper, plastic, and glass can all be recycled. What else can you recycle?

PRACTICE QUESTIONS

1.

Read a Photo

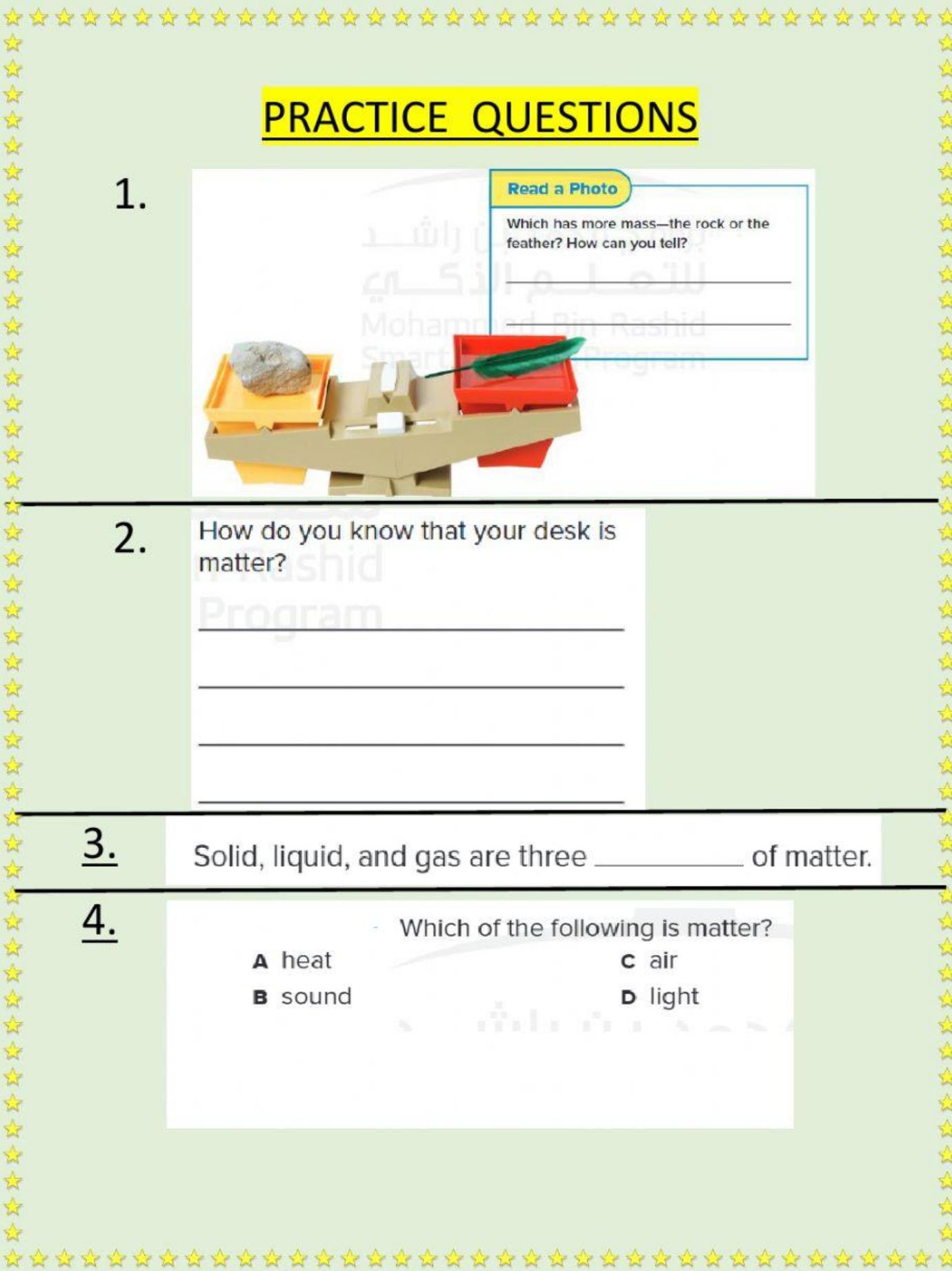
Which has more mass—the rock or the feather? How can you tell?



2. How do you know that your desk is matter?

3. Solid, liquid, and gas are three _____ of matter.

4. Which of the following is matter?
A heat **C** air
B sound **D** light



5.

Study the table below.

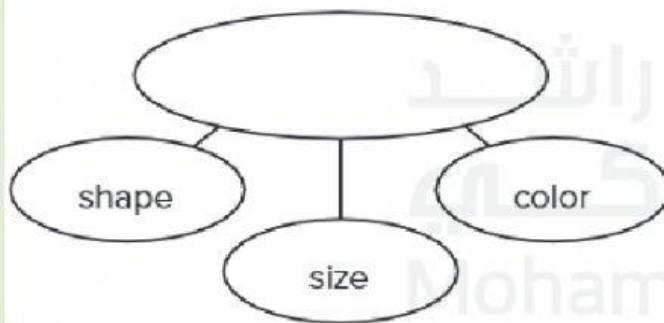
Liquid	Gas	Solid
coffee	water vapor	book
milk	helium	desk
juice	shoe	paper

Which word is in the wrong column?

- A** coffee
- B** milk
- C** desk
- D** shoe

6.

Study the diagram below.



Which of these belongs in the blank oval?

- A** buoyancy
- B** properties of matter
- C** volume
- D** units of measurement

7.

Matter is anything that has

- A** mass and volume.
- B** mass and buoyancy.
- C** volume and buoyancy.
- D** weight and buoyancy.

8.

The laboratory equipment below would be used to measure



- A** volume.
- B** mass.
- C** weight.
- D** length.

9.

Complete the chart below.

State of Matter	Property	Example
gas	does not have a definite shape or volume	A.
solid	B.	pencil
C.	has a definite volume, but no definite shape	oil

10.

Mass is the measure of the

- A** amount of matter making up an object.
- B** weight of an object.
- C** space an object takes up.
- D** density of an object.

FILL IN THE BLANKS

11. Amount of matter in an object is called _____

12. Amount of space an object takes up is called _____

13. Upward force exerted by liquid or gas is called _____

14. We choose different materials to do different jobs based on their _____

15.

The gaseous form of water is called _____.

16.

Color is an example of a(n) _____ of matter.