Matter and its properties (review exercises)

1.- What do you know about mass and volume?

Select the correct answer.

1. Which has more mass: a kilogram of salt or a kilogram of sugar?

A	1 kg of salt.
B	1 kg of sugar.
C	Both have the same mass.

2. How many millilitres are in two litres of water?

A	2,000 mL.
B	200 mL.
C	2 mL.

3. How many cubic centimetres are in a litre of water?

A	1,000 cm^3.
B	100 cm^3.
C	1 cm^3.

2.- What do you know about density?

Look at the picture. Which cube has a higher density? Select the correct answer.

A The cube on the right, because it weighs the same as the cube on the left but has more volume.

B Both have the same density because the scales are balanced.

C The cube on the left, because it weighs the same as the cube on the right but has less volume.

3.- What do you know about matter?

Select the correct answer.

1. What is mass?

A A specific property of matter.

B The amount of matter in an object.

C The amount of space that an object occupies.
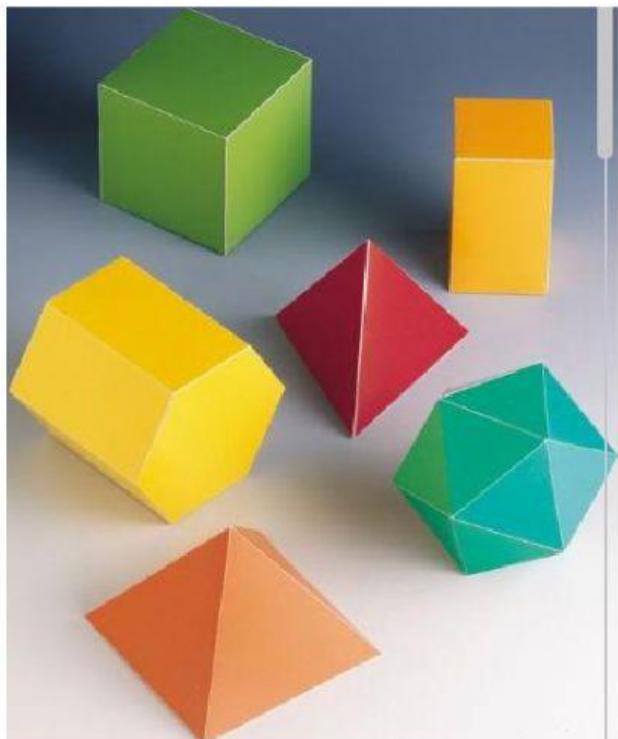
**2. What is the unit of measurement for mass?**

A Litre or millilitre.

B Cubic metre.

C Kilogram or gram.

3. How can you measure volume?

A Using measuring cylinders.

B Using scales.

C Using electronic scales.

4. How can you calculate the density of an object?

A Dividing its volume by the space occupied.

B Dividing its mass by its volume.

C Dividing its volume by its mass.

5. Why does an object float in water?

A Because its density is lower than the density of the liquid.

B Because its density is higher than the density of the liquid.

C Because its density is equal to the density of the liquid.

6. Which material is obtained from tree trunks?

A Pottery.

B Wood.

C Glass.

7. What is an example of a material which is a good conductor of heat and electricity?

A   Pottery.

B   Wood.

C   Gold.

8. In which centuries have new materials been developed?

A   The 20th and 21st centuries.

B   The 18th and 19th centuries.

C   The 19th and 20th centuries.

9. What is PVC used for and why?

A   It is used to make wetsuits because it is flexible and elastic.

B   It is used to make pipes because it is waterproof.

C   It is used in construction because it is very resistant.

10. Which new material is used to communicate information and take pictures of the organs inside our body?

A   Optical fibre.

B   Carbon fibre.

C   Solar shade clothing.

4.- Can you identify the new materials in these photographs?. Choose the correct answer.

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

5.- Complete the text with these words.

amount – lower – transparent – conductors – mass –
space – higher – flexible – composites – colour –
density – work – light – optical

Everything around us is made of matter. Matter has general properties, such as   ,

and specific properties, such as   .

Mass is the   of matter in an object. Volume is the amount of

an object occupies.

We calculate the   of an object by dividing its mass by its volume. An object floats

when its density is   than water. An objects sinks when its density is

than water.

Materials have properties than make them useful for differents purposes. Wood is light and

Easy to   with. Glass is   . Textiles are   .

Pottery is   . Metals are good   .

New materials have been developed, such as plastics,   ,   fibre

and smart textiles.

6.- Classify these properties of matter in "general properties" or "specific properties".

| colour | mass | density |

| taste | hardness | volume |

General properties:

Specific properties:

7.- Look at the photos, read the sentences and choose the correct options.

A

a. The density of the brick is   than

the density of water. So it   in water.

B
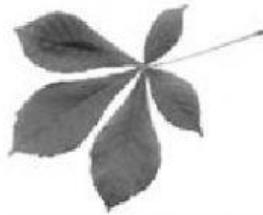
b. The density of the leaf is   than

the density of water. So it   in water.