**1. Complete these sentences.**

*●*  is everything around us that has mass and volume.

*●*  is the space that an object occupies.

*●*  is the amount of matter there is in an object.

**2. Write True (T) or False (F).**

*●* We measure mass in litres.

*●* We measure volume in grams or kilograms.

**3. Label the picture with the words in the box.**

pure substance, homogeneous mixture, heterogeneous mixture



**4. Which sentences are correct? Circle.**

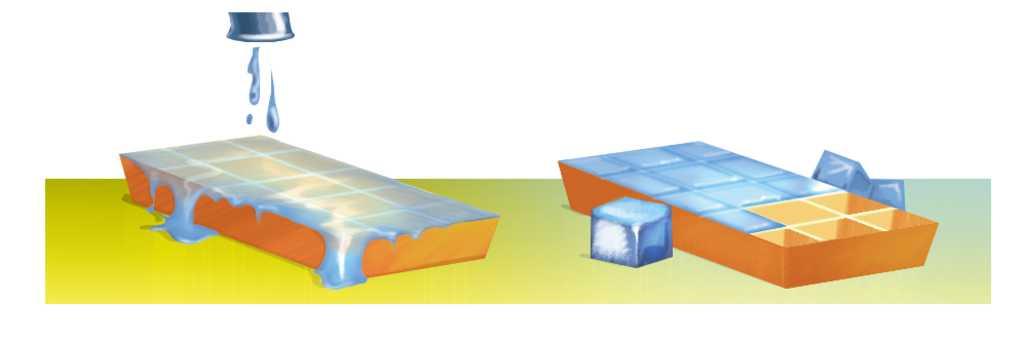
A. Solid matter has a definite shape. It occupies the same amount of space at all times.

B. A liquid occupies the same amount of space at all times.

C*.* A gas has a definite shape and volume.

**5. Write the names of the physical changes below each picture.**





**6. Complete these sentences.**

*●*  changes change the composition of matter and make new substances in the process.

*●*  changes change the shape but the matter stays the same.

**7. Write some examples of physical and chemical changes.**

**8. Write True (T) or False (F).**

*●* A material of animal origin can come from under the ground.

*●* A material of plant origin can come from a tree.

*●* A material of mineral origin can come from a worm.

**9. Which sentence is the best definition of artificial materials?**

A. Materials that we find in nature.

B. Natural materials that we transform into other materials.

C*.* Materials of mineral origin that we transform into other materials.

**10. Match the properties of materials to the definitions.**

Conducts heat *●*

Impermeable *●*

Transparent *●*

Elastic *●*

Strong *●*

Flexible *●*

*●* Theysupport heavy things.

*●* You can stretch them but they return to their original shape.

*●* You can see through them.

*●* Heat travels through them.

*●* Liquids stay inside them.

*●* You can fold them many times and they don’t break.

**11. Complete the text with the correct materials.**

If we want to build a house, we must use , because it is very hard and strong. For the windows, we use a transparent material like . For the walls and roof of the, house we use impermeable materials like bricks and .

**12. Choose the material in the box that each sentence is describing.**

polyester, cotton, wool and leather,

plastic and wood, rocks, steel, asphalt

*●* It is hard and strong and we use it for making machines and tools.

*●* They are natural materials and we use them for making clothes and shoes.

*●* It is impermeable and we use it for making roads.

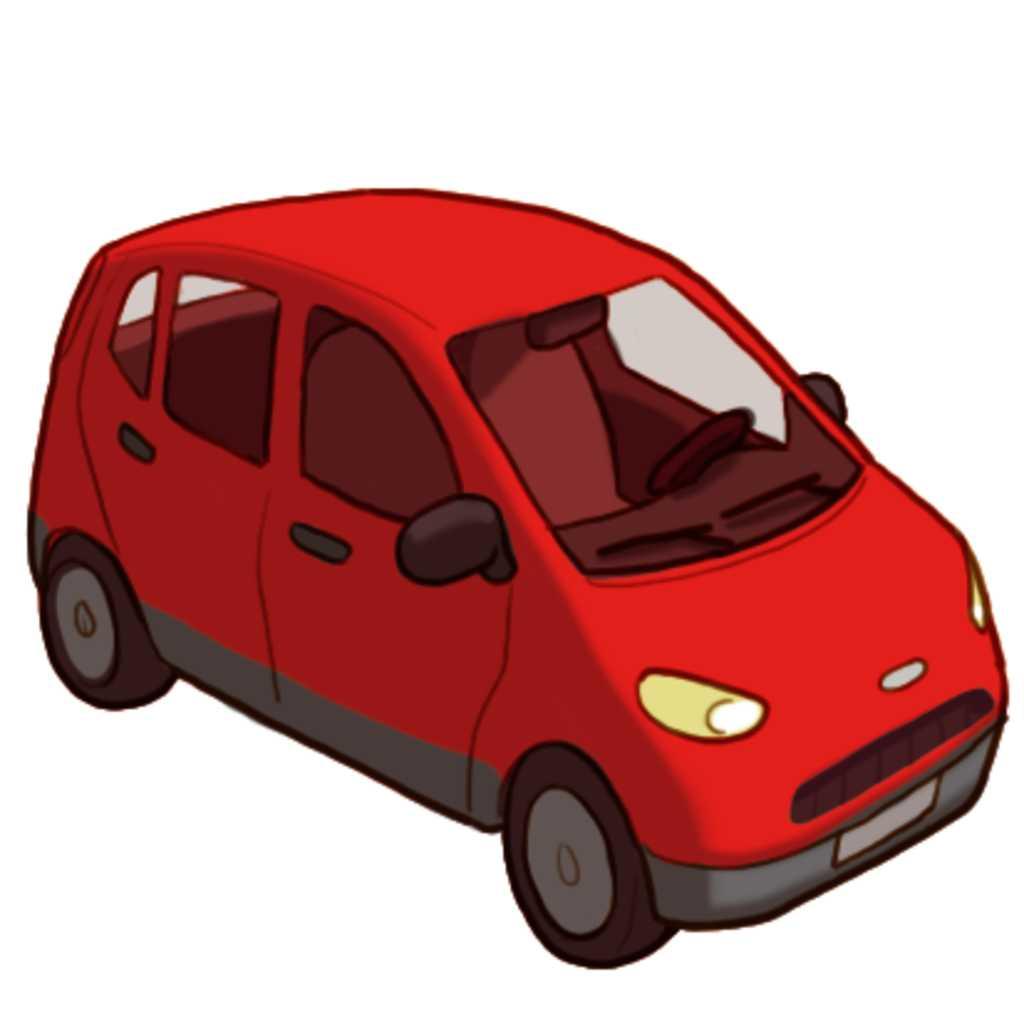
*●* We use them for making tools that protect us from heat and electricity.

*●* They are hard and strong and we use them for building walls.

*●* It is an artificial material and we use it for making clothes.

**13. What are the 3Rs and what do they mean?**

**14. Classify these machines in the table below.**

**  **

|  |  |
| --- | --- |
| **Simple machines** | **Complex machines** |
|  |  |

**15. Match the type of energy with its definition.**

Manual energy *●*

Electrical energy *●*

Heat *●*

*●* Electricity creates this energy.

*●* Burning materials create this energy.

*●* Humans generate this energy.

**16. Complete the text using the words in the box.**

axle, pivot, rope, lever, pulley, simple, wheel

A machine is made from one or two components. The most common ones are:

* The . This is a long bar that moves up and down over a point we call a .
* The . This is a circular object that rotates around a central

.

* The . This has a wheel and a .

**17. Write True (T) or False (F).**

*●* Brakes are a set of axles that are joined to the handlebar.

*●* The handlebar is a lever that changes the direction of the bike.

*●* The wheels of a bike turn on a lever.

**18. Match the machines to their uses.**

Printing press *●*

Steam engine *●*

Radio *●*

*●* Uses the energy from water vapour to move machines.

*●* Allows us to reproduce books.

*●* Tells us what is happening in the world.

**19. Machines are constantly changing. Circle the incorrect reason for changes to machines.**

A. The discovery of new materials, like plastic.

B. The discovery of new energy sources, like electricity.

C*.* The discovery ofnew means of transport.