

# Everyday materials

## Objects and their purpose

An **object** is something that can be seen or touched.

An object's **purpose** is what we use it for.



- Object: spoon
- Purpose: to eat with



- Object: hat
- Purpose: keep head warm

## Materials

Objects can be made of different **materials**.



- Object: table
- Material: wood



- Object: bottle
- Material: plastic

Materials can be **natural** or **man-made** (humans made them):

Natural materials:

- metal
- wood
- cotton
- rubber

Man-made materials:

- paper
- plastic
- glass

## Physical properties of materials

- **dull**: something that is not clear, bright or shiny.
- **hard**: describes something that is firm. If you push it, it will not change shape.
- **rough**: describes something that feels bumpy to touch.
- **shiny**: describes something that appears bright because it reflects light.
- **soft**: describes something that is not firm, that you can push your fingers into.
- **smooth**: describes something that does not feel bumpy to touch, fingers slide easily over it.



# Uses of everyday materials

## Physical properties of everyday materials

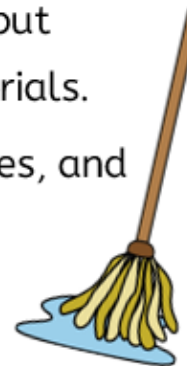
Materials like wood, plastic, metal, brick, paper and cardboard have different **physical properties**.

- **absorbent**: a material that soaks up liquid
- **heatproof**: a material that does not allow heat through
- **malleable**: a material that is easy to shape
- **waterproof**: a material that does not allow water through
- **windproof**: a material that does not allow wind through

## Using materials to make objects

Some objects are made from one type of material, but other objects are made from a combination of materials.

Different parts of the object need different properties, and using two materials solves this problem.

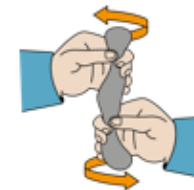


## Some materials can change shape



they can be **squashed**

they can be **bent**



they can be **twisted**



they can be **stretched**

The handle of this mop is made from wood; it is hard and you can push it along the floor.

The head is made from an absorbent material.



# Hot and cold deserts

## What are deserts?

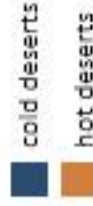
Deserts are places with very little precipitation.  
They have a very dry climate.  
Deserts can be hot and dry, or cold and dry.

- **precipitation:** The fall of water as rain, sleet, snow or hail.
- **climate:** The long-term summary of the weather conditions.

## Where are deserts found?



Deserts are found in all continents of the world.  
Most hot deserts are near the Equator.  
Most cold deserts are near the North Pole or South Pole.



## What are hot and cold deserts like?

Hot deserts can have:



rocks



sand dunes  
(hills made of sand)



small settlements



an oasis  
(a place where water is found)

Cold deserts can have:



mountains



ice sheets  
(layers of ice that cover the land for a long time)



research stations  
(Antarctic)