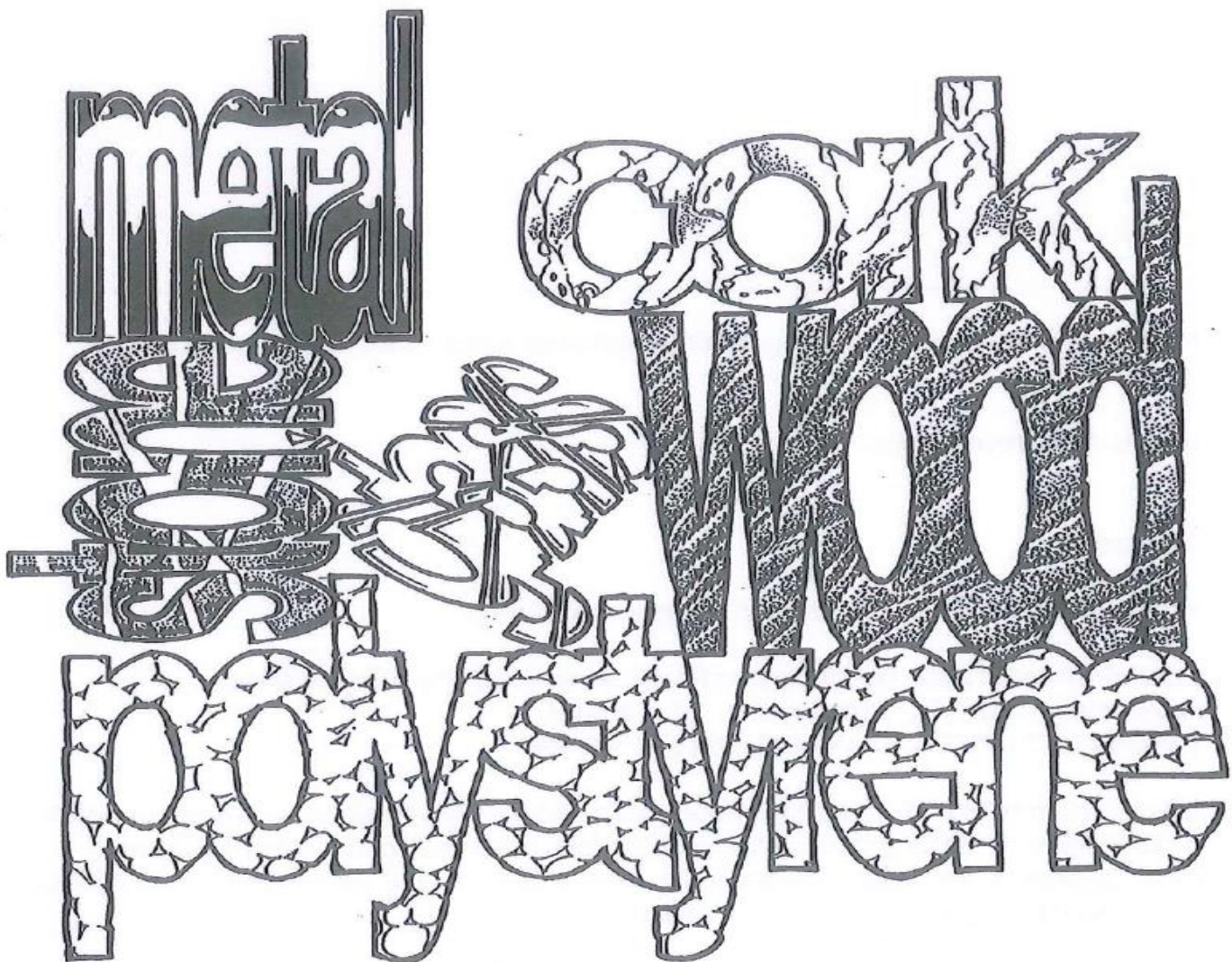


# MATERIALS AND THEIR USES



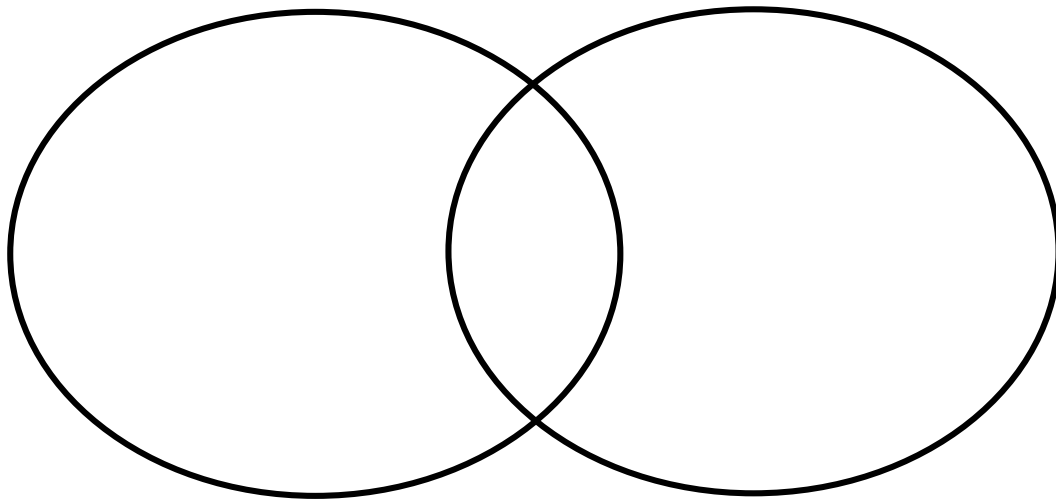
Materials and their uses

NFU 51

Name: \_\_\_\_\_

## Sorting into sets

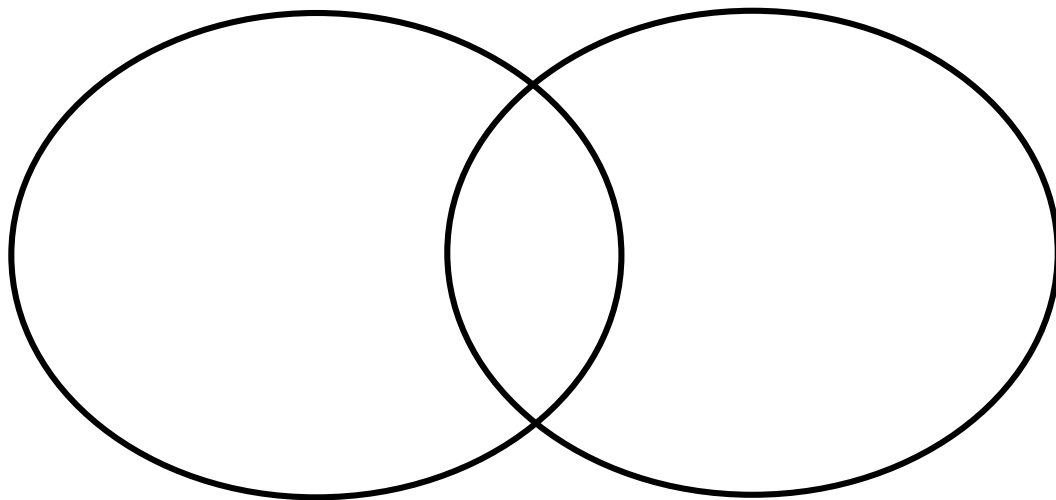
Collect 10 items and sort them into the following sets:



shiny

bendy

Think of 2 other ways to sort the objects



\_\_\_\_\_

\_\_\_\_\_

version R01234.15.04

Name: \_\_\_\_\_

## What are they made of?

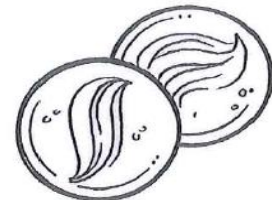
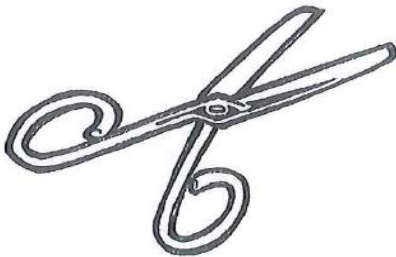
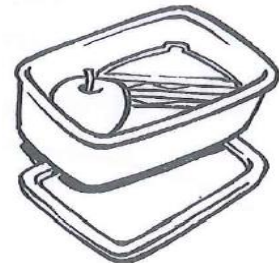
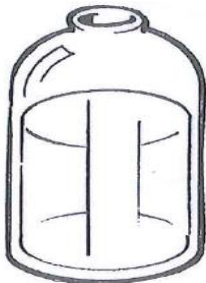
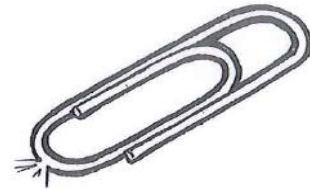
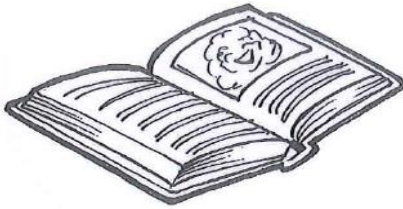
Write the type of material under each object.

metal

wood

plastic

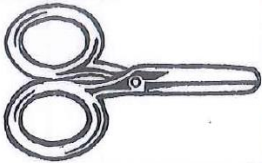
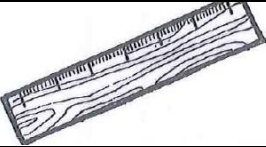

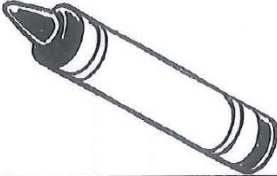


glass



Name: \_\_\_\_\_

## Magnetism

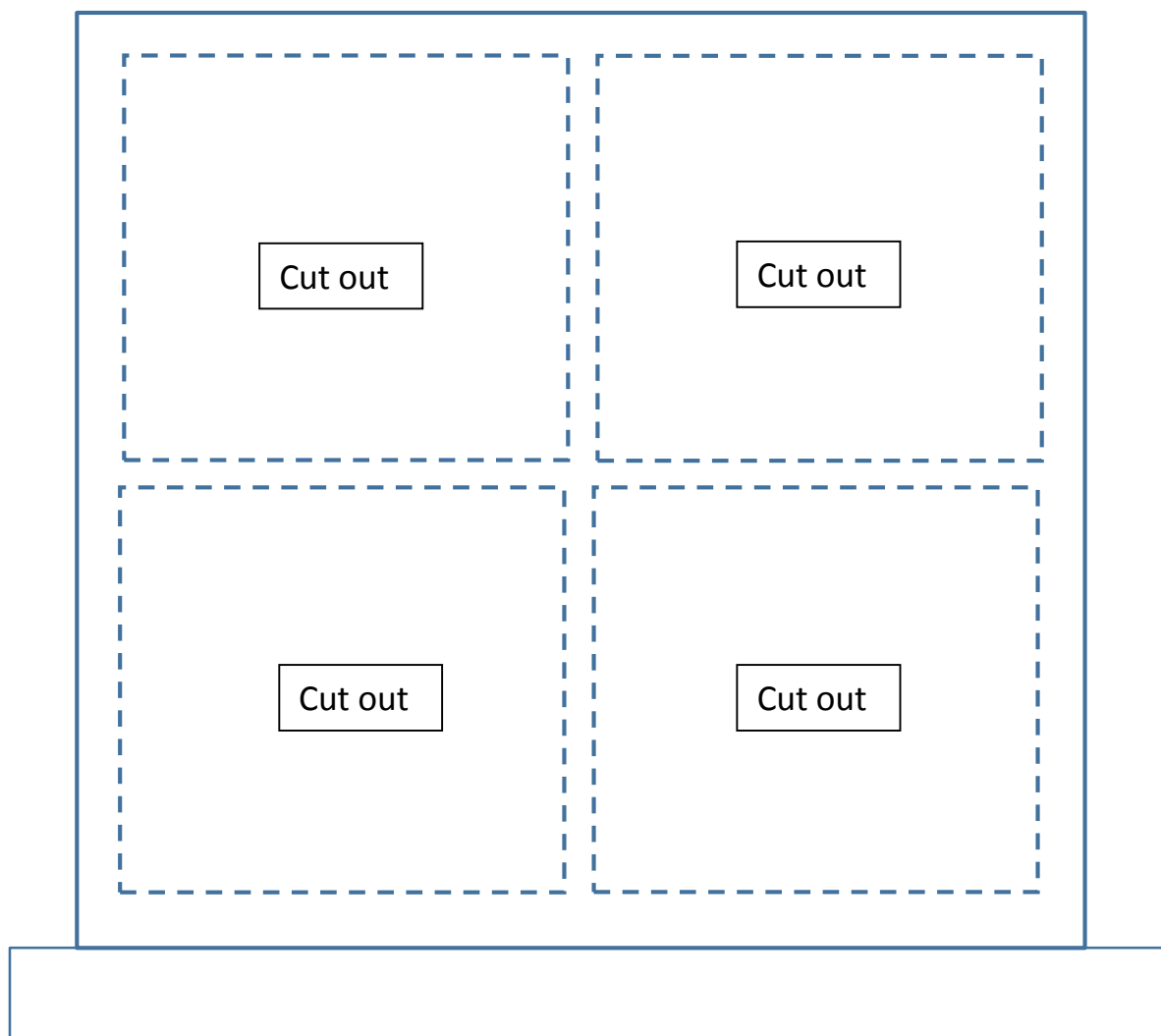
Find out if the objects are attracted to magnets.

Object	I think it will be attracted to a magnet YES / NO	It was attracted to a magnet YES / NO	I was right or wrong ✓ or X
			
			
			
			
			
			

Name: \_\_\_\_\_

## Windows

Cover the four parts of the window with four different materials. You could use: Kitchen roll. Polythene, tissue paper, cling film, acetate.



Hold your window frame up to the light and look through it. Which windows can you see through?

Name: \_\_\_\_\_

## Floating and Sinking

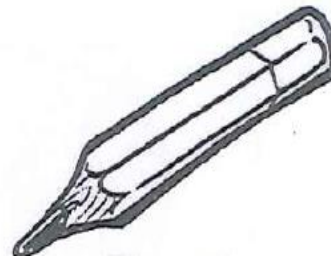
Collect these materials. Guess whether they will float or sink and tick the box.



Float   
Sink



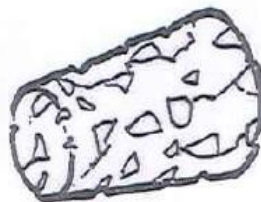
Float   
Sink



Float   
Sink



Float   
Sink



Float   
Sink



Float   
Sink

Which things floated? Draw them here

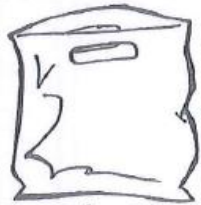

Which things sank? Draw them here


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Name: \_\_\_\_\_

## Heavy or Light?

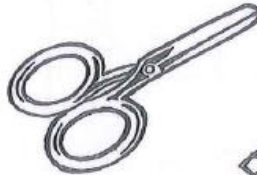
Find these 5 objects and arrange them in order.



carrier bag



stone



scissors



ruler



cork

heaviest \_\_\_\_\_ lightest

1

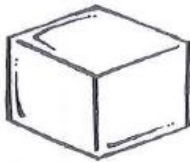
2

3

4

5

Find these 5 objects and arrange them in order.



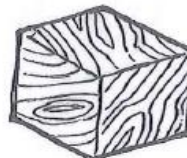
plastic



rock



metal



wood



cork

heaviest \_\_\_\_\_ lightest

1

2

3

4

5

Were the results the same? \_\_\_\_\_

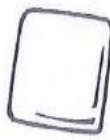
Name: \_\_\_\_\_

## Rough or Smooth?

Collect these materials:



metal



plastic



wood



paper



rock



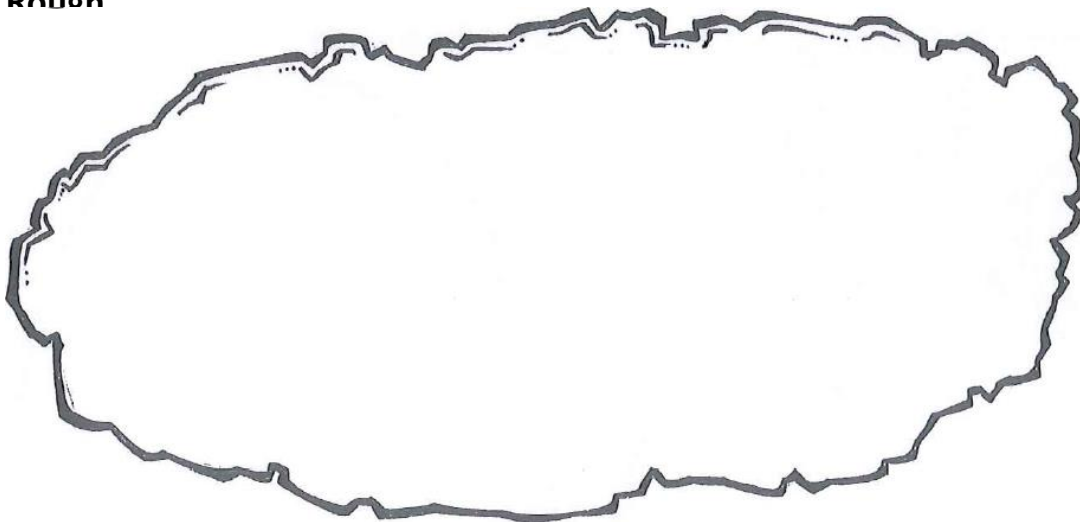
cork



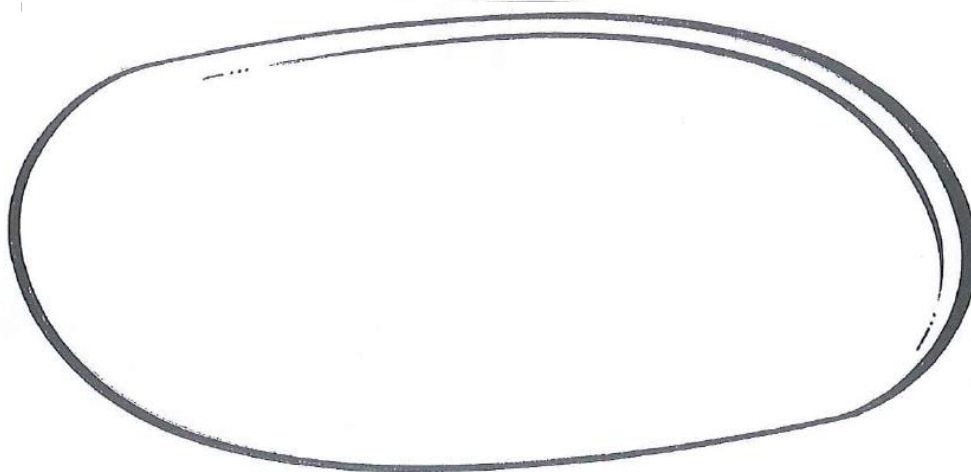
polystyrene

Touch each material. How do they feel? Sort them into **ROUGH** and **SMOOTH** materials.

**Rough**



**Smooth**





Name: \_\_\_\_\_

## Warm Or Cold?

Collect these materials:



metal



plastic



wood



paper



rock

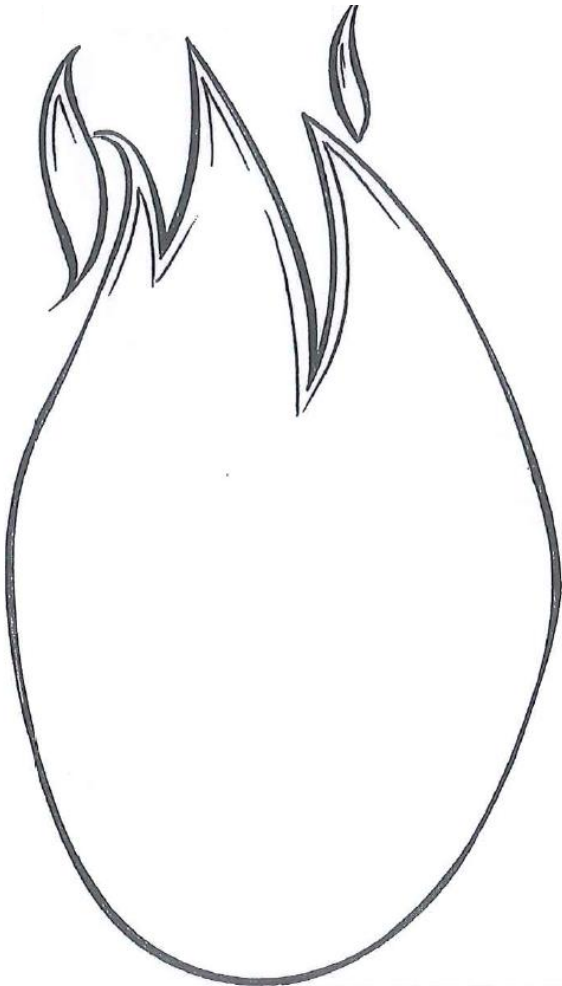


cork

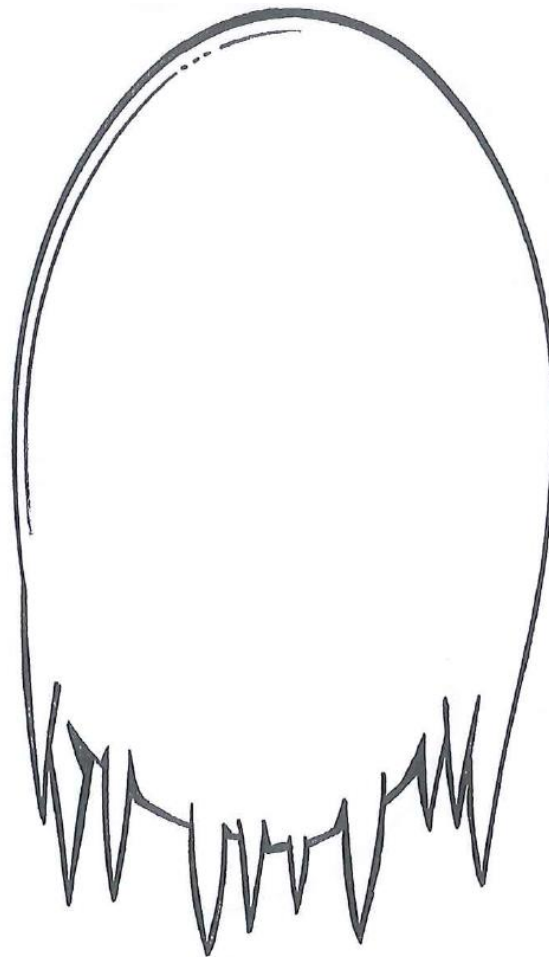


polystyrene

Touch each material. How do they feel? Sort them into materials which are cold or warm to touch.



Warm to touch



Cold to touch

Name: \_\_\_\_\_

## Feely box

Use a cardboard box which is large enough for you to put your hand in. Cut a hole in one side of the box. Paint or cover your box in a bright colour.

Decorate your box with shapes, card, paper, wool etc.

Collect some objects to put into your box, such as:



marble



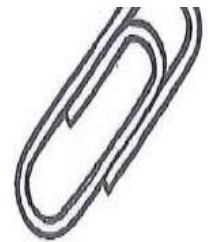
cotton wool



plastic cube



coin



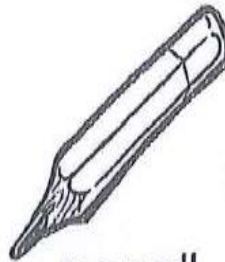
paper clip



cotton reel



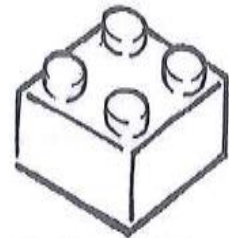
rubber



pencil



cork



building block

Invite a friend to feel the objects and guess what they are – without taking the object out of the box!

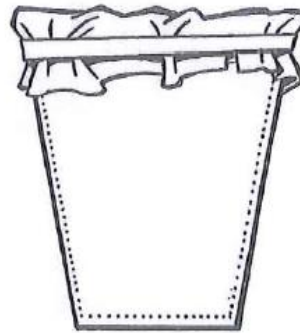
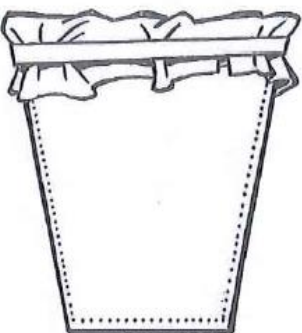
Name: \_\_\_\_\_

## Umbrellas

Which material would make the best umbrella? Collect some material such as:

*Tissue paper, plastic bag, kitchen roll, fabric, paper, acetate sheet, blotting paper.*

Secure them with an elastic band over a clear container. Pour on some water and watch what happens. Draw your results below.



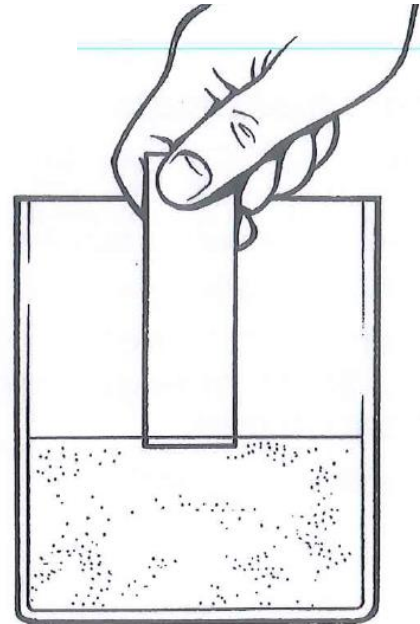
I think \_\_\_\_\_ would make the best umbrella because \_\_\_\_\_



Name: \_\_\_\_\_

## Absorbency

1. Collect some materials such as kitchen roll, writing paper, plastic bag, blotting paper, tracing paper.
2. Cut a strip from each, ensuring they are all the same size. Put some water in beakers – make sure they all have the same level.
3. Dip each strip on the surface of the water for the same length of time.



Now measure how far up the strips of paper the water has travelled.

Material	How far the water soaked up cm
Kitchen roll	
Writing paper	
Tracing paper	
Plastic bag	

Which one soaked up the most water? \_\_\_\_\_

Will it be good for mopping up spills or keeping dry? \_\_\_\_\_

Name: \_\_\_\_\_

## How do you feel?



metal



plastic



wood



paper



rock



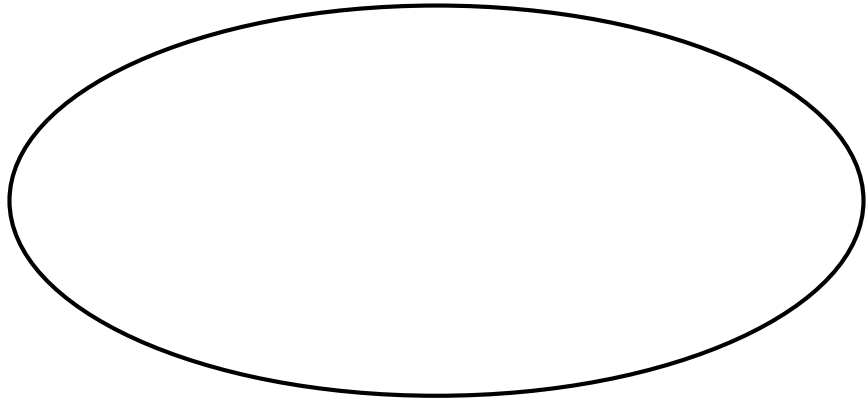
cork



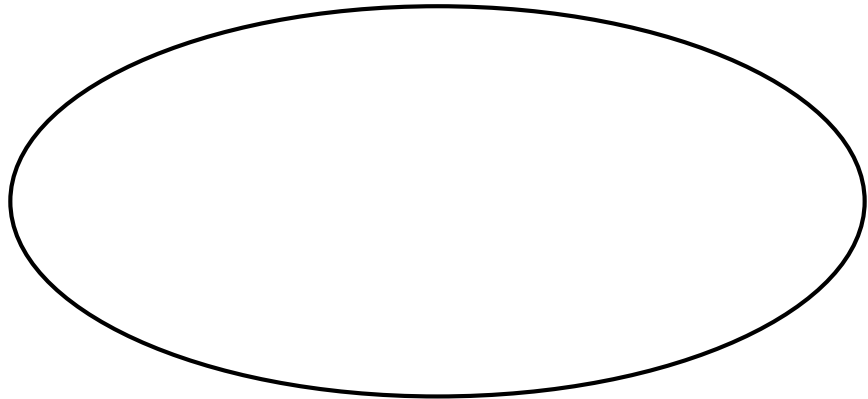
polystyrene

Touch each material. How do they feel? Sort them into sets. Some may go in more than one set. Some may not belong in any.

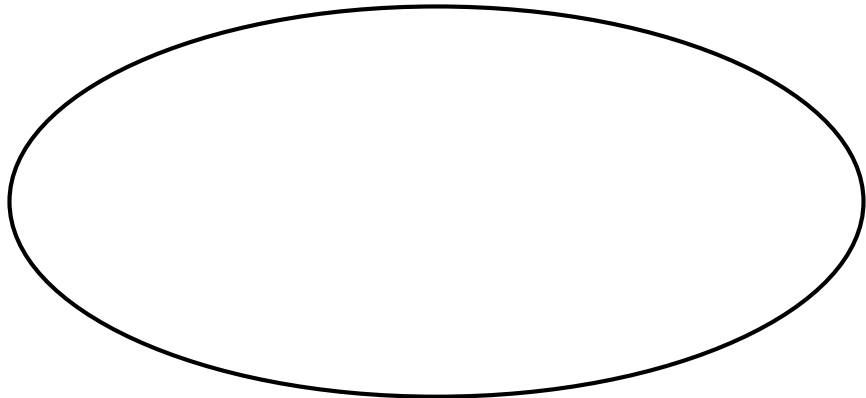
Smooth



Squashy



Soft



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Name: \_\_\_\_\_

## Hard or Soft?



metal



plastic



wood



paper



rock



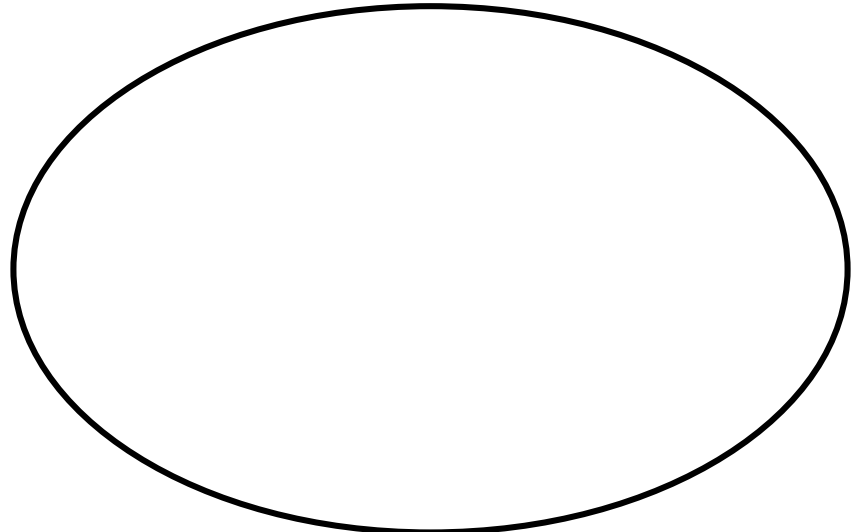
cork



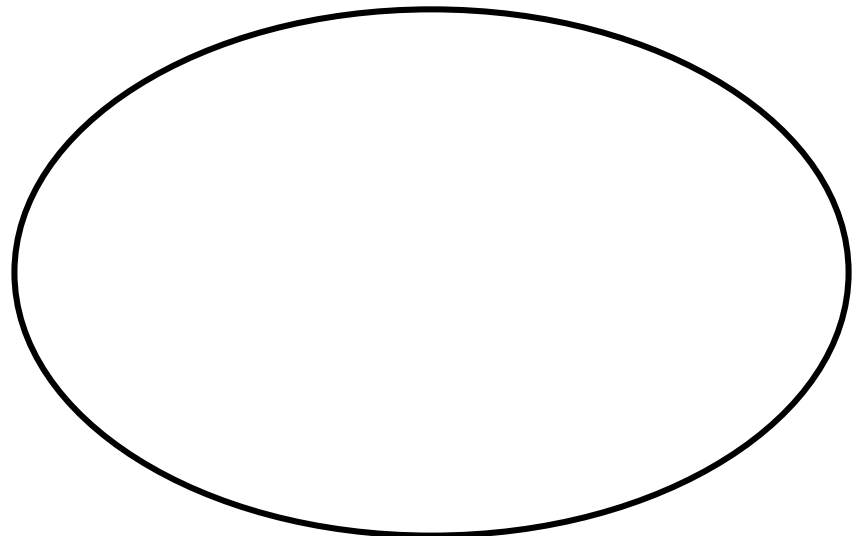
polystyrene

Touch each material. How do they feel? Sort them into materials which feel **HARD** or **SOFT**.

Hard



Soft



Materials and their uses

NFU 51

Name: \_\_\_\_\_

## Sorting into sets

Collect these materials:



metal



plastic



wood



paper



rock

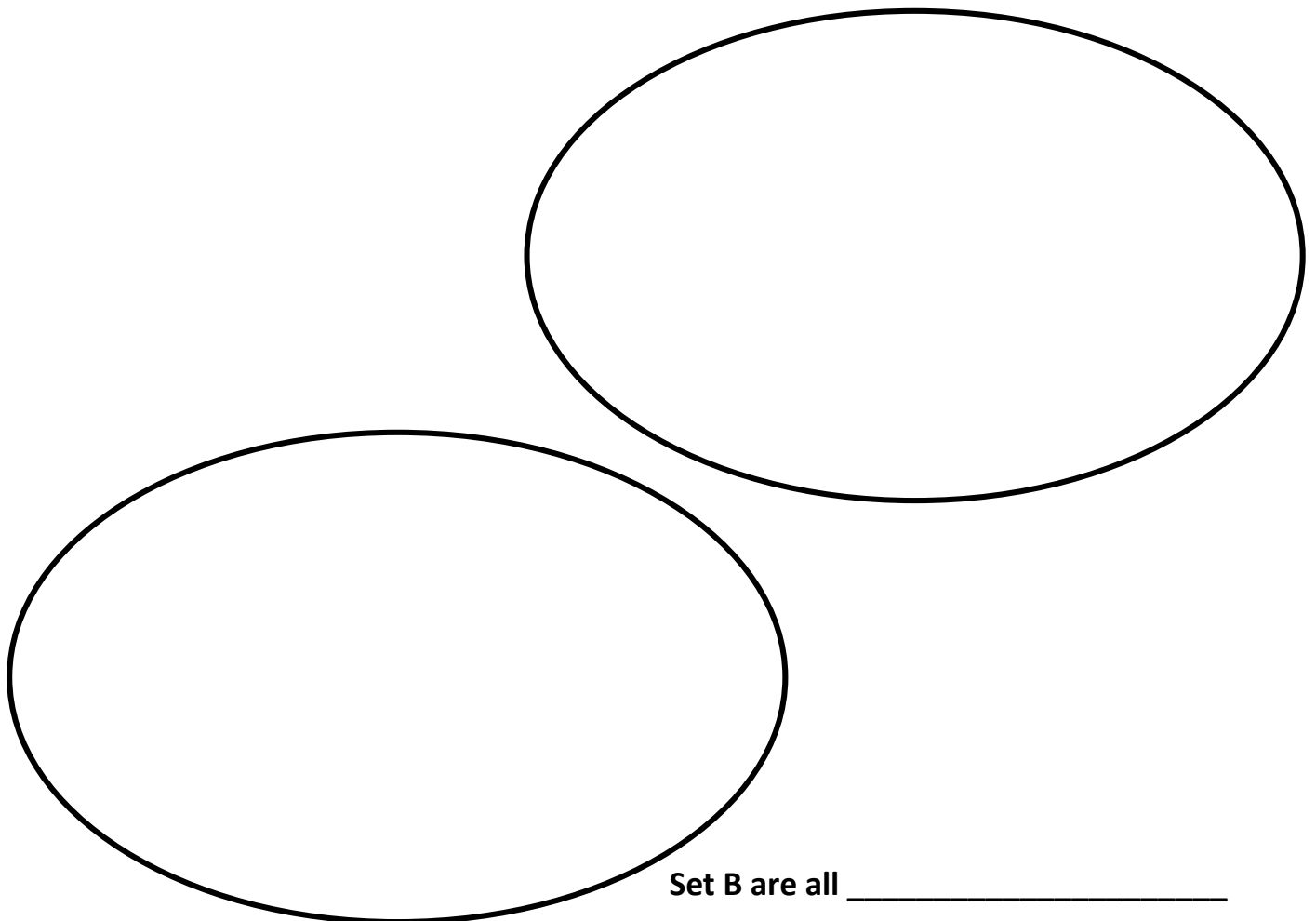


cork



polystyrene

Set A are all \_\_\_\_\_



Set B are all \_\_\_\_\_

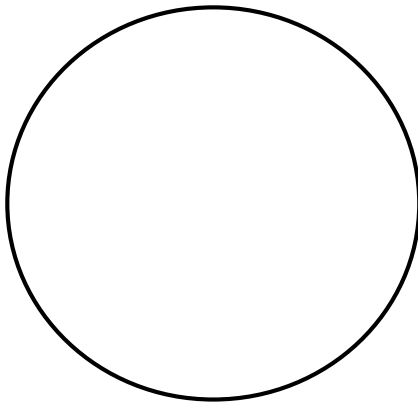
version R01234.15.04

Name: \_\_\_\_\_

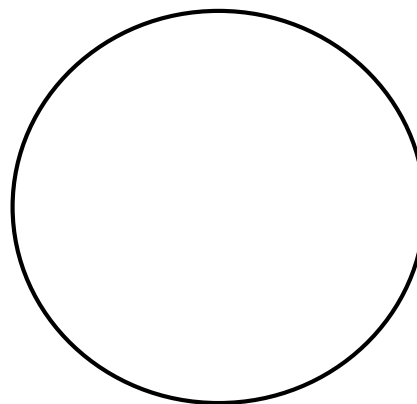
## Similar or Different?

Choose 2 objects that are made from different materials. Draw them here:

Object A



Object B



warm

hard

Examine your objects to see how they are similar and how they are different.

Cold

They are both \_\_\_\_\_

They are both \_\_\_\_\_

They are both \_\_\_\_\_

smooth

Only object \_\_\_\_\_ is \_\_\_\_\_

Only object \_\_\_\_\_ is \_\_\_\_\_

Only object \_\_\_\_\_ is \_\_\_\_\_

sharp

shiny

rough

light

bendy

squashy





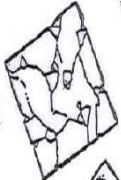


blunt

version R01234.15.04



Name: \_\_\_\_\_

What have you learned about these materials? Colour the correct boxes:

Metal		squashy	hard	soft	heavy	light	rough	smooth	float	sink	warm	cold
Clear plastic		squashy	hard	soft	heavy	light	rough	smooth	float	sink	warm	cold
Wood		squashy	hard	soft	heavy	light	rough	smooth	float	sink	warm	cold
Paper		squashy	hard	soft	heavy	light	rough	smooth	float	sink	warm	cold
Cork		squashy	hard	soft	heavy	light	rough	smooth	float	sink	warm	cold
Rock		squashy	hard	soft	heavy	light	rough	smooth	float	sink	warm	cold
Polystyrene		squashy	hard	soft	heavy	light	rough	smooth	float	sink	warm	cold

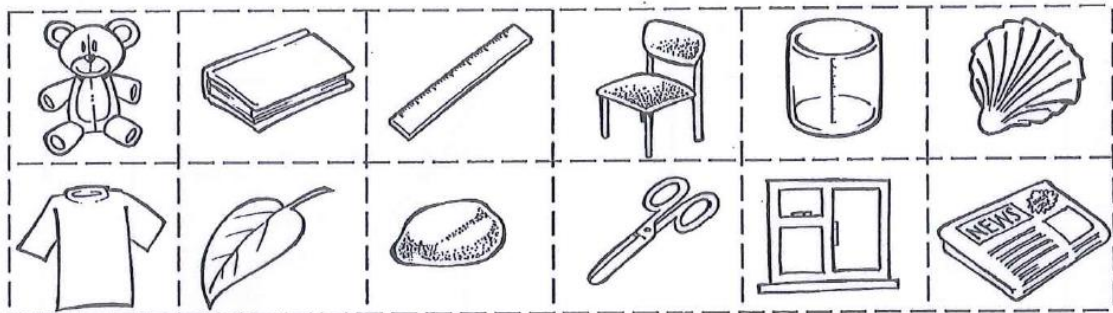
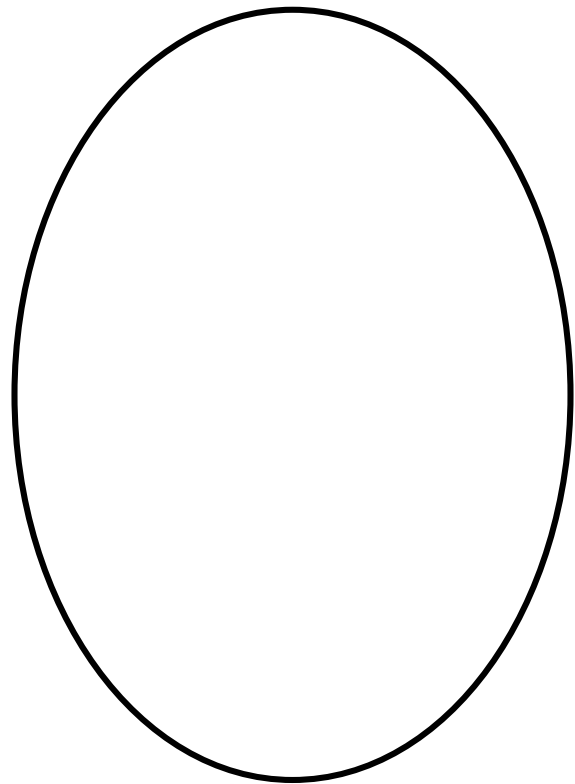
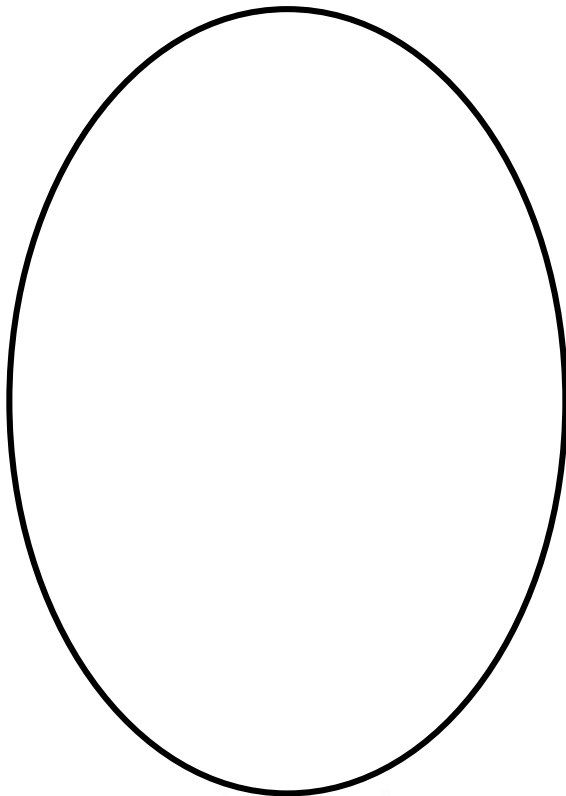
Name: \_\_\_\_\_

## Man – made or Natural?

Colour the objects at the bottom of the page and cut them out. Which objects have been made from NATURAL or MAN MADE materials? Stick them into the correct set below.

Natural

Man – made





Name: \_\_\_\_\_

Look at these objects. Carefully stretch them.



straw

Will it stretch?

Yes	No
-----	----

Will it break?

Yes	No
-----	----

Will it go back?

Yes	No
-----	----



elastic  
band

Will it stretch?

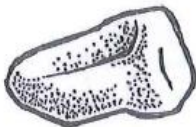
Yes	No
-----	----

Will it break?

Yes	No
-----	----

Will it go back?

Yes	No
-----	----



plasticine

Will it stretch?

Yes	No
-----	----

Will it break?

Yes	No
-----	----

Will it go back?

Yes	No
-----	----



strip of  
paper

Will it stretch?

Yes	No
-----	----

Will it break?

Yes	No
-----	----

Will it go back?

Yes	No
-----	----



plastic  
bag

Will it stretch?

Yes	No
-----	----

Will it break?

Yes	No
-----	----

Will it go back?

Yes	No
-----	----



eraser

Will it stretch?

Yes	No
-----	----

Will it break?

Yes	No
-----	----

Will it go back?

Yes	No
-----	----

Name: \_\_\_\_\_

## What are they made from?

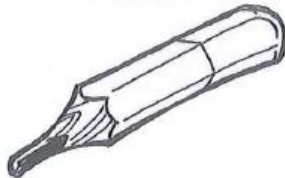
Join the object to the material it is made from.



scissors



straw



pencil



building  
block



ball

wood

plastic

metal



coin



table



carrier  
bag



pencil  
case



paper clip