

Materials and Properties

Objects are made from different materials. The materials used to make an object are chosen for their properties.

Choose an object from around your home or school. Draw a picture of it and label the different materials it is made from. Identify the properties these materials have, and why they were chosen to make the object.

Have a look at this example, then try your own:

Object: Frying pan.



Materials:

Metal to conduct heat from the hob and allow the food in the pan to heat up and cook.

Plastic to insulate against the heat, so that you can hold the pan without getting burnt.

Object:

Materials:

Easter Crispy Cookies Recipe

You Will Need:

3 tbsps butter or margarine

300g regular marshmallows

6 cups rice pops

Icing sugar

Sprinkles

Large roasting tin

Cooking spray

Greaseproof paper

Egg-shaped cookie cutter

Large saucepan

Cooling rack



Method:

1. Melt the butter in a large saucepan.
2. Add the marshmallows and stir until they have all melted.
3. Take the saucepan off the heat and add the rice pops.
4. Stir all the ingredients together until the rice pops are all covered in marshmallows and butter.
5. Prepare the roasting tin by coating it with cooking spray and pour the mixture in.
6. Put the greaseproof paper over the mixture to prevent it from sticking, and roll it out.
7. Using the egg-shaped cookie cutter, cut the mixture into egg shapes. (If the mixture keeps sticking to the cutter, dip it in water).
8. Put the eggs on a cooling rack until they have set.
9. Make up some icing sugar. This will be used to stick the sprinkles onto the egg. (You could also use melted chocolate if you prefer.)
10. Dip one end of the eggs into the icing sugar then into the sprinkles.
11. Leave the eggs to set.

Chemical Creations


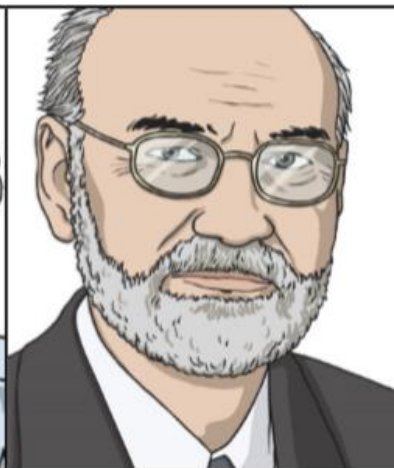



Scientists use chemical reactions to create useful new materials.

Can you create a fact file about a scientist and the new material they made?

You should research the scientist and their life, such as when and where they lived, and what they did. You should also find out about the new material, its properties and how it is useful.

Your fact file could be written on a piece of paper, made into a book or created using a computer. Include pictures and diagrams to add interest!

Examples of scientists and the new materials they made include:

		
Ruth Benerito, who invented wrinkle-free cotton.	Spencer Silver, who invented the glue for sticky notes.	Leo Baekeland, who invented a plastic called Bakelite.
		
Harry Brearley, who invented stainless steel.	John McAdam, who invented tarmac.	

Or maybe you have your own idea!

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