

Properties of Materials and Dissolving

Complete **five** activities by Friday **XXX**. The sensible thing would be to do one activity a day. You do not need to do all eight on the grid. Choose the ones that interest you the most. You can do the activities either in google docs, google slides or on paper.

Comparing and grouping everyday materials

- Find 10 items from around the house.
- Sort them into two groups: natural materials and human-made materials.
- Can you put them in order from least flexible to most flexible?
- Rearrange them in order from smoothest to roughest.
- Make up your own category and put them in order.
- Take a photo to **Share with your teacher.**

Dissolving experiment!

You will need:

- Clear container
- Water, Salt, Sugar, and Flour

Which of these materials do you think will dissolve in water? Let's find out!

1. Fill your clear container with water, add a teaspoon of salt. What can you see?
2. Now give it a stir, what happened? Did it dissolve?
3. Repeat with other substances.

Draw a picture or make a table to record what you found out.

Share with your teacher.

BBC Bitesize

Which materials dissolve in water?

Click on this link to [BBC Bitesize](#)

You can even test dissolving some of the material in your own home.

What did you find out?

Share with your teacher.

Materials Song

Check out the [Materials Song](#) from YouTube.

Can you learn the song?

How many of the things from the song can you find around your house?

Why wouldn't you wear paper clothes in the rain or use wood for a window pane?

Record yourself singing the song.

Share with your teacher.

Properties and uses

Look for summer, winter, and waterproof clothing around your home. Why do you think some things are better worn for different activities?

Draw a picture or take a photo of yourself dressed for an extreme environment or activity. Label and describe what you are wearing and why you chose it.

Share with your teacher.

Dissolving Art

Did you know some pen inks can dissolve in water? This is called **chromatography**.

Try making some [chromatography art](#). You will need:

- Variety of felt pens or markers
 - Paper towel, coffee filter or absorbent paper
 - Water
1. Draw on the paper towel (or other) with felt pens making dots and lines.
 2. Dip an edge of the paper towel in water.
 3. Watch your markings, are they spreading?

Take a photo.

Share with your teacher.

Problem Solving House for 3 Little Pigs

Do you know the story of the 3 Little Pigs? You can listen and read along [here](#).

Can you build a house for the 3 little pigs that is strong and water proof? Use materials from your recycling bin.

Test your house by blowing with a hair dryer and sprinkling some water on top.

Is it still standing? Which materials did you use? What would you do differently next time?

Share with your teacher

What is an Engineer?

Find out more about engineering from [Tomorrow's Engineers](#).

Engineers do all sorts of work.

Choose one that interests you and watch the video.

Draw a picture of yourself as an Engineer and where you would like to work.

Share with your teacher.

P2-4

Through exploring properties and sources of materials, I can choose appropriate materials to solve practical challenges.

SCN 1-15a

Classifies materials into natural and human-made (synthetic).

Identifies properties of different materials, for example, rigidity, flexibility, rough, smooth and waterproof, and their uses linked to their properties.

I can make and test predictions about solids dissolving in water and can relate my findings to the world around me.

SCN 1-16a

Links new knowledge of dissolving to real-life examples of things that dissolve and things that don't dissolve.

Predicts, investigates and records how solubility is affected by heat and stirring.