

Ideas for using the Fabric Sample Pack



An assortment of fabric samples that can be used for a variety of investigations, experiments and projects.

As pupils explore and discover the properties of the different materials, they can develop critical thinking and problem-solving skills.

The fabric samples can be used in a number of ways. Here are some ideas you may like to try out. We hope you enjoy them.

Exploring

Explore the fabrics using your senses.



Use a feely bag to explore the texture of the fabrics. Describe the fabrics in the feely bag. Can the children guess which fabric is being described.



Use microscopes or magnifying glasses to look closely at the fabrics and zoom in and out to explore details.



Scrunch the fabrics to explore what the fabrics sound like.

Sort the fabrics into different groups based on whether they are stiff or soft, have holes or no holes. Use observation, discussion and scientific investigations to explore the fabrics.

Identifying and Naming

Use **vocabulary cards** to identify and name the materials. Fabrics come from plants, animals, or man-made fibres woven together. They are used for a variety of purposes such as clothes, bedding, parachutes, soft toys and towels.

Different fabrics have different properties. They can be flexible, insulating, absorbent, warm and long-lasting. **Sort** the materials into groups and explain your decisions. Learn to **describe the fabrics and their properties** and choose the right material for different purposes. For example, 'We get wool from sheep. Wool is a natural fabric. It is warm, hard-wearing and absorbent, making it perfect for the jumpers, scarves and hats we use to keep us warm when it's cold outside.'

Explore the difference between natural and synthetic fabrics. Natural fabrics are made from plants or animals such as wool, cotton, silk. Synthetic fabrics are man-made materials such as nylon, polyester and polyester blends.

Try activities like:

I Spy looking for objects made from a certain fabric e.g. 'I spy with my little eye something that is made from felt.'

Treasure Hunt finding objects made from different fabrics around school/home with clues based on the materials properties and uses.

Use the fabrics to make a display with names and information.

Hands-on Investigation Ideas

Challenge the children to find the best fabric for a particular purpose e.g. for a bedroom curtain, for a winter coat, etc. Ideas for activities could include:

Light and Shadow- Which fabrics are opaque? transparent? translucent? Investigate to see how much light comes through each fabric. Hold the materials up to a light and sort them into the three categories. Extend the learning by measuring the light intensity passing through each material using a light sensor or handmade shadow scale. Set up a scenario such as, 'Teddy cannot sleep as there is a streetlight outside his house and too much light is coming through his window. Can you find the best fabric to make his curtains?'

Insulation- Use the fabric selection to insulate cups of hot water. Which material can help to keep my cup of tea the warmest the longest? Use data logging equipment to monitor the changes in temperature over a time period. Explore -What effect does varying the number of layers have on keeping something warm?

Changing State- Do some fabrics dry faster than others? Encourage pupils to set up a fair test and to find out where their washing would dry the quickest.

Sound- Which fabric would be best to use as a sound insulation around a noisy alarm clock? Investigate.

Investigate the properties needed for an umbrella or reflective jacket to be seen safely when out at night. Hands-on experiments could include:

Waterproof tests- Test materials to see which will keep Ted dry in a downpour of rain. Discuss why certain materials are used for raincoats or umbrellas.

Absorbent tests- Measure and record how much water each material absorbs over a set time and decide which material would be best for making a mop for Cinderella to clean the floors.

Rubbing tests- Which fabric is the most hard-wearing and would be the best to make trousers for a rock climber?

Creative Activities

There are many ways you can use the fabrics creatively for making things in art and design projects such as using the fabrics to create collages. You could also look at patterns, match colours and think about how some animals and plants use camouflage to protect and hide themselves in their environment.

Useful Vocabulary

Absorbent- Able to soak up and contain liquid.

Durable- Tough and can withstand some damage.

Fabric- Material made from threads or fibres that are woven, knitted or bonded together to form a continuous piece of cloth.

Insulator- A material that doesn't let electricity flow through it.

Malleable- Material that can be flexible and bend without being broken.

Man-made fabrics- Comes from sources made by humans such as nylon or plastic.

Material- What an object is made from.

Opaque- Not clear. Not transparent.

Natural fabrics- Comes from natural sources, plants and animals, such as cotton, wool, and leather.

Properties- The strengths and weaknesses of a material.

Translucent- Allows light to pass through but is not transparent.

Transparent- Clear and see-through.