Great Fashion Share

What are our clothes made from & why?

AGE RANGE: 5-7 years

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

OVERVIEW

Pupils ask and investigate scientific questions to better understand what fabric their clothes are made from. They use their own clothes and items from around the school, providing a real-world context for investigating, identifying and classifying materials based on their properties. Pupils also learn more about sustainability and responsible use of materials.

LEARNING OBJECTIVES

- Describe the simple physical properties of everyday materials
- Compare and group together a variety of everyday materials on the basis of their simple physical properties

WORKING SCIENTIFICALLY

- Use observations and ideas to suggest answers to questions
- Gather and record data to help in answering questions
- Draw simple conclusions from evidence

KEY WORDS

- fabric
- sort
- classify
- group
- identify
- describe

RESOURCES

- Washing baskets x 2
- Range of clothing
- **Alternative Materials Fact Cards**
- **Clothing Writing Templates**

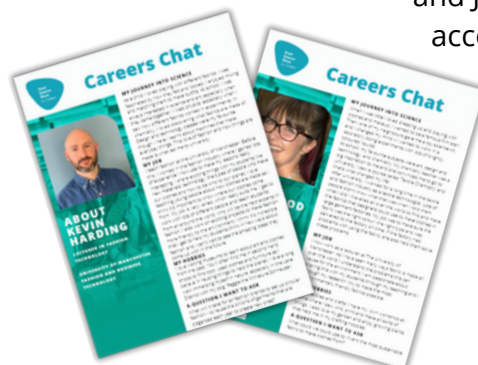### TO SUPPORT TEACHING

- 5-7 Great Fashion Share Video
- 5-7 Great Science Conclusion Creator

Inspire your pupils by exploring careers in STEM using our **Careers Chat** resources. Download profile cards for Kevin and Jane and watch the accompanying videos.

Great Fashion Share 5-7 years

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Careers Chat

Kevin's video

Jane's video

Pupils investigate the different fabrics used to make their clothes and why. They identify the properties of the fabrics and which types of clothing they are best used for.

Play the **5-7 Great Fashion Share Video** (part 1) with Jane and Kevin to set the scene. Pause when Kevin sets the challenge of sorting clothes.

1. Collect a large range of clothing, including a variety of fabrics (e.g. wool- a wool jumper or hat; cotton - a school shirt; polyester - a school blazer or gym top)
   Try to collect clothing that the pupils may be familiar with and not so familiar with, e.g.
   - school uniform
   - casual or sports clothes, e.g. jeans
   - adult clothing, e.g. could the pupils borrow a piece of uniform or work wear from the head teacher, site manager?
   - outdoor wear, e.g. high-vis, coats – waterproof & not.

Questioning

2. Pile the clothes in the middle of the carpet area. Encourage the pupils to explore an item by touch (preferably not their own item if brought from home).
What does it feel like?
What words describe the way it feels?
Where/when would you wear it?
What is its main job? e.g. to keep you warm/cool/dry
What colour is it?

Encourage pupils to use language to describe it – soft, smooth, warm, shiny, rough, dull, colourful. Explore the properties together and write down the main characteristics.

3. Place 2 empty washing baskets for the pupils to sort the clothes into groups. Start with 'think, pair, share'. Give them a few minutes in pairs to come up with ways to classify the 'washing'. Pupils share their ideas with the class on how the clothing can be classified:
   - dark/light colours
   - indoor/outdoor clothing
   - warm weather/cool weather clothing

   Sort the clothes according to the pupils' classifications.
   After a few different 'sorts', ask the pupils to think more about what the items are made from (cotton/not cotton). If they're not sure, ask them 'how can we find out?'

Gathering evidence

4. Demonstrate how to find out the type of fabric using the label.
Ask pupils to look at the label in one of the items of clothing. If they see a few different materials on their label, explain that they will use the 'main one' (first on the list).
What other information can we find on the label? e.g. Where it is made?

*You could try the 'Where do clothes come from' activity from Fashion Fixers to **Extend The Learning** (see next page).*

5. Collate the pupils' data using a tally chart on the board as they read their clothes labels. Explain that they are going to use that information to see which fabric is used the most.

Analyse and interpret

Drawing conclusions

6. Once all the pupils have added their data, begin to look for patterns. The **5-7 Great Science Conclusion Creator** can support pupils to think about what their data is showing to identify the most used fabric.
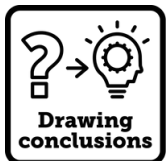
I have discovered that _____ is the most used fabric.

Our tally chart shows this because _____ clothes were made from _____ and this was the highest number.

Questioning

7. Play the rest of the **5-7 Great Fashion Share Video.** Extend the pupils' thinking by sharing the '**Alternative Material Fact cards'** asking them to 'wonder why' some other fabrics are used for different types of clothing or things we have in our home, e.g. shower curtain, carpets, tea towels.
'We found out that most items are made out of polyester. We wonder if it's because it is cheap to make.'
'We found out that most items are made out of cotton. We wonder if in the future they could be made from bamboo because it is cheaper.'

Share with us

Create a GSSfS Washing Line in the classroom using the '**Clothing Writing Templates'** or hand drawings of clothes items. Pupils add key facts about the most common material or write their conclusion.
E.g. We discovered that...
20 school T-shirts were made out of cotton
10 jumpers were made out of cotton

EXTEND THE LEARNING!

Has the Great Fashion Share ignited an interest in your pupils? Follow up activities are available through **Energising Futures' Fashion Fixers** challenge.
The free resources enable pupils to explore the impacts the fashion industry has on our world and showcases science and technological innovations for a more sustainable fashion future.
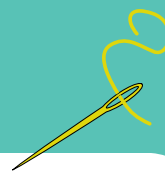
**Take me to the resources**

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How is bamboo fabric made?

How is bamboo fabric made?

1. Removing the bamboo cellulose: bamboo leaves and the soft inner part from the bamboo trunk are crushed.
2. Soaking the bamboo fibres: crushed bamboo fibres are soaked in a special solution.
3. Spinning the fibres: the fibres are washed and spun into yarn that can be woven into fabric.
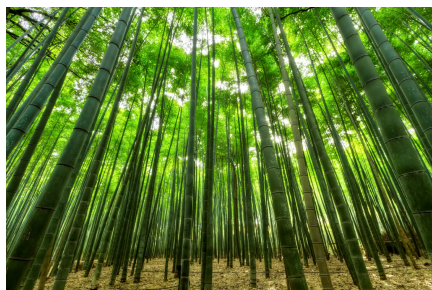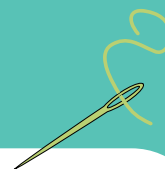
Properties
- stretchy
- breathable
- keeps you warm

Bamboo comes from China and other countries in East Asia.

Where does alpaca wool come from?

The fur of an alpaca is called '**fleece**' or '**fibre**'.
1 alpaca fleece = 4 jumpers
It can take 4 people to cut the fleece from the alpaca.
It comes off in one big piece and is then used to make clothes.
This process is called 'shearing'.

Alpacas eat grass. They only graze on the top layer of grass so the underneath can continue to grow without having to be re-planted. Alpaca fleece is very sustainable and good for the environment.

Properties
- soft
- eco-friendly
- keeps you warm

What do you think could be made from alpaca wool?