



Rags and tatters

Theme: *Key Stage 2 Science - Grouping and classifying materials*

National Curriculum reference

Sc3 - Materials and their Properties: Grouping and classifying materials, 1a

Starter activity

The children have been brought in by your TA and are seated for afternoon registration. You enter the classroom in a state of utter disarray! Your hair is tousled, your shirt/blouse is ripped, your trousers are torn, your jumper is unravelled and your shoes are split. However, you act normally, sit down, and start taking the register, allowing the class to question and draw their own conclusions. Wait for the question that will inevitably come: 'What happened to you, Sir/Miss?' Explain to your shocked and puzzled children that you popped out to get a sandwich at lunch time and tripped through a hedge backwards. You can't believe it...and look what's happened to your clothes!

Starter questions

What has happened to my clothes?
What materials are they made from?
Why didn't my leather jacket/
handbag rip? What is my shirt made
from? Why? What does this tell us
about why it fared so badly? Which
materials are best used for shoes,
trousers, jackets, etc.? Why did my
trousers get wet, but not my jacket?

Follow-up

Now the children are engaged, ask them to consider clothing used in different climates, and the many different types of fabrics there are. They can investigate how many they know of and why certain materials are chosen for different garments and purposes, drawing up a fact file and using data handling to identify the most popular fabrics and the most common. Which fabrics are the most expensive, the oldest, or the most modern?



Good vibrations

Theme: Key Stage 2 Science - Vibrations and sound

National Curriculum reference

Sc4 - Physical processes: Light and sound, 3g

Starter activity

Invite the children back into class after break or lunch. As you walk into the classroom, it is filled with very loud noises (sound effects can be downloaded or you may choose very loud music, or even better, live music - a drum kit is fantastic!). Whatever noise you choose, it needs to be at a level that makes it difficult for the children to hear what you are saying, but that is not detrimental to their health.

Attempt to call the register as normal and give out instructions for the next lesson. You may use more hand signals than normal, or write instructions down on the board for children to follow. After a few minutes, turn the noise off.

Starter questions

Why was it difficult to hear what I was saying? What do you think was happening to your ears? Were you uncomfortable? Why do sounds have the ability to fill a room, making it impossible to hear anything else? What is a vibration? How do we hear things? How does the sound get from where it is being made to our ears? How could we stop the sound from reaching our ears?

Follow-up

Ask the children if they can 'see' sounds, and get them investigating whether they can or not with a range of instruments, such as a cymbal, a drum and a guitar. Be careful to distinguish between seeing strings etc. vibrate and actually seeing sound. Once vibration has been established as a key element of hearing, children can begin to investigate the relationship between volume, pitch, duration and timbre of sounds, and experiment with preventing sound from travelling or making it travel long distances.