Y1 - Materials

Lesson 5

Lesson	5 of 6

Key Unit Question:	Why do we use different materials for different things?

Key Lesson Question:	Which material would be best for an umbrella?

Learning Objective

I can investigate the properties of different materials.

NC Links

- Describe the simple physical properties of a variety of everyday materials
- Compare and group together a variety of everyday materials on the basis of their simple physical properties
- Identify and classify
- Observe closely, using simple equipment
- Perform simple tests

Resources

- Differentiated activity, challenge and next step activities
- A range of different materials for the children to investigate and explore such as wood, metal, plastic, glass and rubber.
- Objects made from wood, metal, plastic, glass and rubber
- Large paper/post it notes to record children's ideas
- Water and water tray
- Weighing scales (optional)

Teaching Input

- Thinking time. Can you remember the names of these objects and the material from which it is made?
- Blot needs our help again. Blot says he needs help to make an umbrella to keep him dry. He need our help to decide on the best material from which to make an umbrella.
- Can we help Blot? What is an umbrella made from? Allow time for children to discuss with their partner before sharing as a class. Share children's ideas and record on paper-post it notes for the science display.
- An umbrella needs to be waterproof, light and strong. Why do we not want a heavy umbrella?
- Investigation. We are going to investigate different materials to see which material would be the best to make an umbrella from.
  - First we need to see which materials are waterproof and which are not. We could pour water on each and see what happens. If it is waterproof the water will run off.
  - Then we need to investigate which are heavy and which are light. We could weigh them or we could pick them up to see which ones are the lightest.
  - Finally we need to see which ones are strong and which are fragile. We could try to break/tear each material to see which breaks the easiest.
- Plenary. Discuss what we have learnt today. Ask children 'what if…?' questions and have class discussions. (What if windows were made from fabric? What if houses were made from glass? What if clothes were made from metal?)

Differentiated Activities

⭐ (working below)	⭐⭐ (working at)
Investigation worksheet. Children to test each material to see if it is waterproof, strong and light. This is best completed with a small group with adult support.	Investigation worksheet. Children to test each material to see if it is waterproof, strong and light.

Challenge activity

Easy – Which was the best material? Tick the one you have chosen. Why have you chosen this one?
Medium - Write a letter to Blot to explain what you found out in your investigation.

Next Step activity

Blot thinks glass would make the best umbrella because it is waterproof. Is he correct?

Assessment questions

What is this object?
What material is it made from?
What does it feel like?
Can you describe the properties of this material?
Why is this a good material from which to make an umbrella?

Self assessment

I can identify the properties of different materials.
I can identify the best material from which to make an umbrella.

Key vocabulary

material, object
Types of material such as: wood, metal, plastic, glass, rubber, rock, fabric, paper and brick
Words to describe materials such as: hard, soft, rough, bumpy, smooth, fragile, strong, heavy, light