





I OPIC: Materials	Age 6-7		Litle: Waterproof materials
Working Scientifically		Conceptual Knowledge	
Plan: Ask simple questions and		Use knowledge and understanding of	
recognising that they can be answered in		properties of materials to compare	
different ways		suitability for different uses	

Assessment Focus

- Can children discuss/use different ways to test how waterproof materials are?
- Can children compare materials on the basis of waterproofness?

Activity Today we are materials engineers.

Provide a collection of different types of materials. Discuss which could be the 'best' material – draw out that need to know best for what. Today we want to know the 'best' for waterproof coat/umbrella/cover for summer fair cakes etc – choose appropriate context. Pupils discuss how to compare how waterproof the different materials are, for example:

- Drip water onto the material
- Pour water onto the material
- Wrap up a cotton ball in the material & put into water

Children will plan and carry out a simple test to measure the waterproofness of different materials – groups try difference ways to answer the question.

Children sit in a circle and consider one group's investigation – was this a good test? Why? Do you agree with their results?

Adult collect utterances or ask target children or those who have not worked with an adult.

Adapting the activity

Support: Support children to decide which test to carry out. **Extension:** Children independently identify several ways to test. If time, they try more than one method of testing.

Key Questions

- How will you know if it is waterproof?
- How much water will you use? How long will you put it in the water for?
- Can you order the materials: most to least waterproof?
- Do you think everyone else will find the same result?
- How else could you test the material?

Assessment Indicators

Not yet met: Describes their idea/test but it may not help to answer the question and does not consider alternative methods.

Meeting: Explains different tests, e.g. you can find out which is waterproof by --- or ---

Exceeding: Comments on the best way to find out and understands that a comparison has to be fair, e.g. I need to add the same amount of water.

