

## Taking Learning Outdoors

Learning experience and season	
Winter: Properties of materials, protecting against the weather.	
CfE Level: Second	
Experiences and Outcomes and associated benchmarks	
<p><b>E&amp;Os</b></p> <p>By comparing my local area with a contrasting area outwith Britain, I can investigate the main features of weather and climate, discussing the impact on living things. <b>SOC 2-12a</b></p> <p>I can apply my knowledge of how water changes state to help me understand the processes involved in the water cycle in nature over time. <b>SCN 2-05a</b></p> <p>I can recognise the basic properties and uses for a variety of materials and can discuss which ones are most suitable for a given task. <b>TCH 2-10a</b></p>	<p><b>BMs</b></p> <p><b>SOC 2-12a</b></p> <ul style="list-style-type: none"><li>• Compares and contrasts the differing effects of the weather on the people of Britain and a contrasting area, providing at least three similarities and/or differences.</li></ul> <p><b>SCN 2-05a</b></p> <ul style="list-style-type: none"><li>• Demonstrates understanding of the processes involved in the water cycle.</li></ul> <p><b>TCH 2-10a</b></p> <ul style="list-style-type: none"><li>• Recognises characteristics of groups or materials.</li><li>• Selects suitable materials to use in a task.</li><li>• Discuss the uses of materials.</li></ul>
Overview of learning experience	
Pupils choose from a variety of natural and synthetic materials that protect against the weather and demonstrate their effectiveness.	
Outline of learning	
<p><b><u>LI/SC</u></b></p> <p>To collect and present data</p> <ul style="list-style-type: none"><li>• I can choose appropriate material to protect against the weather.</li><li>• I can justify my decisions.</li><li>• I can demonstrate the effectiveness of chosen materials.</li></ul>	<p><b><u>Resources</u></b></p> <ul style="list-style-type: none"><li>• Ice</li><li>• Water</li><li>• Range of materials (e.g. waterproof, insulating, absorbent)</li><li>• Measuring jugs, digital scales, thermometers.</li></ul>

### **Description of learning experience and assessment opportunities:**

#### **Discussion:**

Pupils begin by revising the water-cycle and how it is affected by the changing seasons. They then discuss how materials are used to protect against the weather, giving examples of materials and their uses. Pupils now research how people build shelters or wear clothing that protects against the weather in different climates or extreme environments.

#### **Activity:**

Pupils spend time outdoors, experiencing different aspects of the winter weather, such as wind speed and direction, rainfall, snow and ice, sunshine and temperature.

Pupils work together in pairs or groups to use natural resources from the environment and additional materials to create a shelter or item of clothing to protect against the weather. This could be a full-size item or scale model e.g. for a toy figurine. The pupils should consider how the properties of their chosen materials will protect against water, insulate against heat or cold and protect against the wind. Pupils will be able to justify their choice of materials and demonstrate the effectiveness of their shelter or item of clothing.

#### **Consideration of risk**

Take care in wet or icy conditions.

Take care when collecting items.

If using tools follow relevant risk assessments.

#### **Taking it further – what else could you do?**

- Pupils can research the different ways in which animals are able to keep warm in cold climates or keep cool in warm climates.
- Explore the [MET Office resources for schools](#)