



Buildings and Grounds



Activity Reference	B5.3
Title:	Mouse's Winter Home (To be run in conjunction with the Survival Game – activity B5.3a)
Aim:	To understand what materials are necessary for insulation (To investigate factors affecting survival).
Outcome:	<p>All: Discussed what a mouse needs to survive the cold. Will have created a mouse 'home'</p> <p>Most: As above and will also understand which materials are best to insulate their mouse's home.</p> <p>Some: Will understand why certain materials can insulate and think about how this relates to buildings.</p>
Allocated Time:	<p>First part: 15 mins</p> <p>Second part: 10 mins</p>
Overview:	Investigate animal or plant species – what do they need to live? What is critical to survival? What is comfort?
Resources:	<ul style="list-style-type: none"> • 'Make a mouse' handout for every three children (they will be working in groups of 3) • 'Mouse's Winter Home' question sheet per child. • Plastic disposable cups (for each group of 3) • Warm water (prepared before the activity) • Thermometers (enough for each group) • Red food dye • Scissors • Sticky tape
Background Information / Links:	
Instructions:	<p>Survival Game (see activity B5.3a)</p> <p>Mouse's Winter Home</p> <p>Preparation</p> <ul style="list-style-type: none"> • Divide the class into groups of 3 • Print out enough 'Make a mouse' sheets for each group and enough question sheets for each student.

- Warm some water in a kettle or the microwave and store in a thermos flask for later

Activity Part 1

- Ask the students what happens to the temperature in winter.
- Ask the students for examples of how different animals cope with this.
- Split the students into the groups of three and ask them to colour in their mouse.
- Ask the students to follow the instructions on their 'Make a mouse' sheet and build the mouse.
- Hand out the plastic cups and ask the children to stick the cups to the mouse where indicated.
- Accompany and ask the students to take their mouse outside.
- Fill each mouse with mouse blood (the warm water with the red food dye in)
- Ask the students to measure the temperature of its blood using a thermometer and then create warm a place for the mouse to hibernate and carefully place the mouse inside.

Make sure that you can see all of the children (set working area boundaries)

Warn against any harmful plants/sharp objects/faeces they may encounter.

- Ask the students to measure the air temperature using a thermometer and describe where they hid their mouse. The students should fill this information in on their 'A Mouse's Winter Home' handouts.
- Collect in the thermometers

The mice should be left for a reasonable amount of time, another activity can be done in the gap (Survival Game see activity B5.3a)

Activity Part 2

- Return to the area where the mice are hidden.
- Hand out the thermometers.
- Ask the students measure the temperature of their mouse and record it on the 'A Mouse's Winter Home' handout.
- Bring all the groups together and compare their mouse's temperature with where they put their mouse to hibernate.
- Ask the students these questions:
 - What materials did they use? Why?
 - Which materials were the most insulating? Why?
- Discuss the types of insulating materials we use in our homes.

Higher Ability Learners and AFL:

Describe why a particular material is a good insulator

Resources

A Mouse's Winter Home



Your name

Today's date

Before you hide your mouse, answer the 3 questions below

1. The air temperature wasDegrees Centigrade ($^{\circ}\text{C}$)
2. At the start out mouse's temperature wasDegrees Centigrade ($^{\circ}\text{C}$)
3. We hid our mouse

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When you return to find your mouse, answer the 3 questions below

4. At the end our mouse's temperature wasDegrees Centigrade ($^{\circ}\text{C}$)
5. The warmest mouse's temperature wasDegrees Centigrade ($^{\circ}\text{C}$)
6. The coldest mouse's temperature wasDegrees Centigrade ($^{\circ}\text{C}$)

Make a Mouse

Cut mouse out around solid lines

