



Sample assessment task

Year level	3
Learning area	Science
Subject	Chemical Sciences
Title of task	Heating up and cooling down

Task details

Description of task	Students will provide examples of solids and liquids, and explain the effects of heating and cooling various ingredients.
Type of assessment	Summative
Purpose of assessment	This task may be used at the end of a unit of work to demonstrate student understanding of change of state between a solid and a liquid.
Assessment strategy	Worksheet
Evidence to be collected	Worksheet
Suggested time	20 minutes

Content description

Content from the Western Australian Curriculum	<p>Science understanding A change of state between solid and liquid can be caused by adding or removing heat</p> <p>Science as a human endeavour Science knowledge helps people to understand the effect of their actions</p> <p>Science inquiry skills Represent and communicate observations, ideas and findings using formal and informal representations</p>
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Task preparation

Prior learning	Students are familiar with everyday materials, their properties, and how they may be physically changed. They have investigated and shared practical experiences involving heating, cooling and freezing of different materials.
Assessment differentiation	Teachers should differentiate their teaching and assessment to meet the specific learning needs of their students, based on their level of readiness to learn and their need to be challenged. Where appropriate, teachers may either scaffold or extend the scope of the assessment tasks.

Assessment task

Assessment conditions	Individual
Resources	The following, optional resources have been included to support teachers in developing relevant and appropriate lesson content. BBC Science Clips – Solids and liquids http://www.bbc.co.uk/schools/scienceclips/ages/8_9/solid_liquids_fs.shtml BBC Science Clips – Changing states

	<p>http://www.bbc.co.uk/schools/scienceclips/ages/9_10/changing_state_fs.shtml</p>
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States of matter – 3rd grade

https://www.youtube.com/watch?v=JYf5NDA_Mww

3 States of Matter for kids (Solids, Liquid, Gas): Science for Children – Freeschool

<https://www.youtube.com/watch?v=wclY8F-UoTE>

Heating up and cooling down

Name _____

1. List and/or draw three examples of each.

Solid		
Liquid		

2. Write and/or draw what happens to the following materials when the temperature changes.

	Heated	Cooled
Butter		
Chocolate		
Icecream		

3. Choose another material and explain what happens when the temperature changes.

Material	What happens

4. Choose one of the materials above and explain how it is stored and why?

Sample marking key

Description	Marks
Questions 2,3	
Provides explanation for changes of state in a liquid or solid at varying temperatures. Makes links to real life and provides suitable examples.	4
Suggests explanation for change of state of a liquid or solid at varying temperatures.	2-3
Identifies materials as a liquid or a solid.	1
Subtotal	4
Description	Marks
Question 4	
Demonstrates application of science understanding to show how scientific knowledge is applied to people's daily lives, how foods are stored, and explains why.	4
Describes a personal experience, using science understanding to explain how science knowledge applies and impacts on people's daily lives.	2-3
Provides a limited description of science understanding and its application to the world.	1
Subtotal	4
Total	8