

# Open Awards Qualification Unit



This unit forms part of a regulated qualification.

## 1 Unit Details

Unit Title:	The Science of Making Things – Chemical Sciences in the Home
Unit Reference Number:	Y/650/3660
Level:	Entry Level Three
Credit Value:	6
Minimum GLH:	50

## 2 Learning Outcomes and Criteria

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Know about chemicals and chemical reactions commonly used in the home	1.1 Identify a range of chemicals and chemical reactions commonly used around the home
2. Understand how chemicals and chemical reactions are used in the home	2.1 Explain how chemicals and chemical reactions are used in the home
	2.2 Identify the risks from using chemicals and chemical reactions in the home
	2.3 State the health and safety precautions for using chemicals and chemical reactions in the home
3. Be able to use chemicals and chemical reactions safely in the home	3.1 Take appropriate precautions before and during the use of chemicals and chemical reactions in the home
	3.2 Mix and dilute chemicals according to instructions and safety guidance
	3.3 Use appropriate Personal Protective Equipment (PPE) appropriately when using chemicals and chemical reactions
	3.4 Apply chemical products and reactions according to manufacturers' instructions and guidance

	3.5	Dispose of waste chemical products in the home safely and in line with environmental guidelines
4. Understand how to clean up chemical spills in the home	4.1	Explain the potential impacts of chemical spills in the home for: <ul style="list-style-type: none"> <li>Household objects and materials</li> <li>Humans</li> <li>Pets</li> <li>Foodstuffs</li> </ul>
	4.2	Explain safe ways to clean up chemical spills in the home
5. Know how to make usable products from a range of chemicals	5.1	Identify a range of chemical ingredients commonly found in household products
	5.2	Identify ways chemical ingredients may be combined to make useful products
	5.3	Identify the risks when making useful products with chemicals and chemical reactions
6. Be able to participate in making simple household products with chemical ingredients	6.1	Work with others to choose products to make
	6.2	Work with others to gather equipment and chemical ingredients to make chosen products
	6.3	Participate in appropriate processes to prepare chemical ingredients for chosen products
	6.4	Work safely with others to make simple household products with chemical ingredients
	6.5	Demonstrate products made with chemical ingredients
7. Be able to review own participation in projects to make things with chemicals and chemical reactions	7.1	Identify own contributions to: <ul style="list-style-type: none"> <li>Choice of products and items to be made</li> <li>Gathering and preparing materials to be made</li> <li>Participation in processes to make items and products</li> </ul> final product
	7.2	Identify ways: <ul style="list-style-type: none"> <li>Own contributions</li> <li>Product demonstration</li> <li>End product</li> </ul> could be improved

### Learning Outcome 1 - Indicative Content

Chemicals – the focus is chemicals in their raw state, or pre-mixed - medicines, disinfectants and surface cleaners, deodorant blocks and sprays, bleach and drain cleaners, perfumes, nail polish and nail polish remover

## Learning Outcome 2 - Indicative Content

Uses - Cleaning and sanitising, cooking and baking, gardening and pest control, DIY and maintenance, health and beauty

Health and Safety: Use of PPE

Ventilation

Where safe to use

Age ranges

Safety near food, pets etc