

# CHEMISTRY IN OUR LIVES

This section contains guidance for teachers who want to teach some of the topic in a second language. Guidance is not given for sections that students may want to complete in their main language. You can find further support for teaching in a second language in Supporting Languages under Topic outlines on our website [www.scienceacross.org](http://www.scienceacross.org)

## Part 1 PEOPLE AND CHEMISTRY

### INTRODUCE THE TOPIC

- Do you have any chemicals/chemical products in your home?
- What chemicals/chemical products do you have in your home?

### INTRODUCE VOCABULARY

All the products in the illustration

### HELP STUDENTS TO TALK

If you want, ask the students to work in groups naming the chemical products in the picture. They can work in their main language, but you can go round and encourage them to talk in the second language, helping them with the vocabulary.

## Part 2 CHEMISTRY IN OUR HOMES

### Activity 1

#### INTRODUCE THE TOPIC

What chemical products do you use for:

- cooking/adding to food/preserving food?
- keeping people clean/washing clothes/ cleaning surfaces/decorating?
- cosmetic use/colouring hair?
- treating diseases?
- fuel?
- growing plants/killing insect pests?

Are they natural/manufactured?

What ingredients do they contain?

#### INTRODUCE VOCABULARY

All the products you will need to complete the chart on the Exchange Form. If you want, ask the students to look for the words in the second language in dictionaries. Then check that they are correct.

#### HELP STUDENTS TO TALK

If you want, ask the students to work in groups completing a copy of the chart on the Exchange Form. They can work in their main language, but you can go round and encourage them to talk in the second language, helping them with the vocabulary.

## Activity 2

### INTRODUCE THE TOPIC

- Why is this product dangerous?
- What does it contain?
- What can it do?
- What should you not do with it?

### HELP STUDENTS TO WRITE

If you want, help the students to write warning sentences about their products, like this:

- Danger: this product can...
- Danger: this product contains...
- Danger: do not...

## Activity 3

### HELP STUDENTS TO WRITE

If you want to help your students write about the product they made, you can give them a writing frame like this:

- Objectives - We wanted to make...
- Materials - We used...
- Equipment - We used...
- Process - First... Then/next/after that... Finally...
- Testing - We tested the product by...(---ing)

NB Remind the students to use the correct form of the past tense, e.g. in English, the past simple (collected, added, put, kept etc).

### INTRODUCE VOCABULARY

If you want to help the students with vocabulary, provide them with useful vocabulary. This list of verbs may be helpful:

- Mix/add/pour/filter/cover/stir (gently)
- Heat (gently)/boil/warm/keep...warm/ remove...from heat/burn
- Chop/grind
- Soak/rinse/wash/dry
- Keep...away from...Weigh
- Collect/Allow...to...
- Remove

## Part 3 LIVING WITH CHEMISTRY

### Activity 4

#### HELP STUDENTS TO WRITE

If you want to help your students write about their investigation in the second language, you can get them to use the headings provided and give them useful phrases as in the examples below. You will also need to help them with vocabulary.

#### SUGGESTION A: CHEMISTRY THEN AND NOW

- We interviewed.../asked him/her about...
- Then/in those days/in the 1950s
- People used to...
- Now/nowadays/today

#### SUGGESTION B: A TOPICAL ISSUE

- People/we feel/think/say...
- People/we are worried/concerned about...
- People/we are worried/concerned/afraid that...can cause...
- ...is useful because...
- ...is used for...ing...
- ...is dangerous because...
- ...can cause...

#### SUGGESTION C: A PERSON INVOLVED IN CHEMISTRY

- ...works/ed in...
- ...works/ed as a...
- ...is/was involved in...
- ...is/was famous for...(---ing)
- ...is/was famous because
- ...uses/ed...

### Activity 5

#### HELP STUDENTS TO WRITE

If you want to help your students write about this investigation in the second language, help them to organise their writing by providing headings. Give them useful vocabulary.

NB The passive voice is often used in describing processes (e.g. ...is made from, ...is extracted from...etc). Also, remind the students to use connectors to show the stages in the process (e.g. First..., then/next/after that..., finally...)

## Part 5 COMPARING INFORMATION FROM OTHER COUNTRIES

### HELP STUDENTS TO TALK OR WRITE

If you want to help your students to talk or write about the information they get from other schools, the following phrases may be useful.

#### COMPARING:

- ...more/better/bigger/fewer than...
- ...more/less difficult/dangerous than...
- ...the same as...
- ...as good/bad as...
- ...similar to...
- ...different from...
- They use/used the same apparatus/process
- They use/used different apparatus/a different process
- Their apparatus is/was the same as/different from ours
- They...but/whereas we...
- In ...(France) people..., but in...(Japan)...
- In ...(France), ...is important, but in... (Japan)...

#### GIVING REASONS:

We think this is because.../the reason for this is...

#### SAYING WHAT YOU HAVE LEARNED:

- I/We have learned that...
- The most interesting/unexpected thing I/we have learned is...
- I did not know...
- I have changed my mind about...
- I used to think...