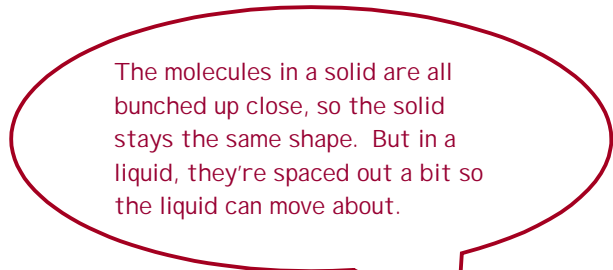


# Cause and effect ...

### Writing Flier 8 Explanation



Sometimes language can be an inadequate tool for explaining how something works. In spoken language situations, we often find ourselves scrabbling for a pencil to draw a diagram – so we can point and indicate movement and direction alongside the verbal explanation (“The electricity goes round here and through here...”). Many children need help in learning how to integrate the visual and the verbal in technical explanations.



The molecules in a solid are all bunched up close, so the solid stays the same shape. But in a liquid, they're spaced out a bit so the liquid can move about.

Explanations occur throughout the curriculum, for instance:

- **science**, e.g. How does insulation work? What causes the seasons?
- **history**, e.g. How did the Romans build their roads? What were the causes of a war?
- **geography**, e.g. Why do coasts erode? What happens when a volcano erupts?

When writing explanations, it is important to draw attention to the main characteristics of various types of diagram (e.g. plans, maps and cross-sections) and ‘skeleton’ note-taking frameworks (flowcharts and picture sequences).

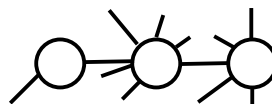


Children can be encouraged to create their own diagrams and notes during investigations in other subjects. These can be taken to the Literacy Hour to provide the content for explanatory writing. As in spoken language, however, a purely written account is often inadequate; children must learn to integrate diagrams and flowcharts with the written word to ensure their explanations are truly effective.

*Devising and drawing a diagram aids understanding, and the finished product provides a focus for a spoken explanation.*

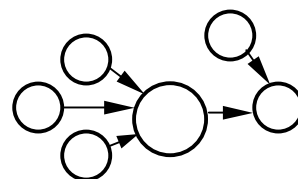
## Making notes for explanation writing

There are two main types of skeleton for explanation text: **diagram** and **flowchart**.



**Diagrams** are simplified drawings of any kind, notably **cross-sections** (seen as a slice through the side), **plans** and **maps** (seen from above). They require clear **leader-lines** and **labels**.

Explanatory flowcharts are usually complex and there are many variations, e.g. cycle; reversible effects.



multiple causes;

### Find out more about explanation



Further case studies (Y1-Y6) can be found on the NLS website:

[www.standards.dfes.gov.uk/literacy](http://www.standards.dfes.gov.uk/literacy)

See also pages 154-155, *Grammar for writing* and *Developing early writing*.

1

In a lesson about solids, liquids and gases, groups of children simulate the activity of molecules as a solid changes to a liquid and a liquid to a gas.

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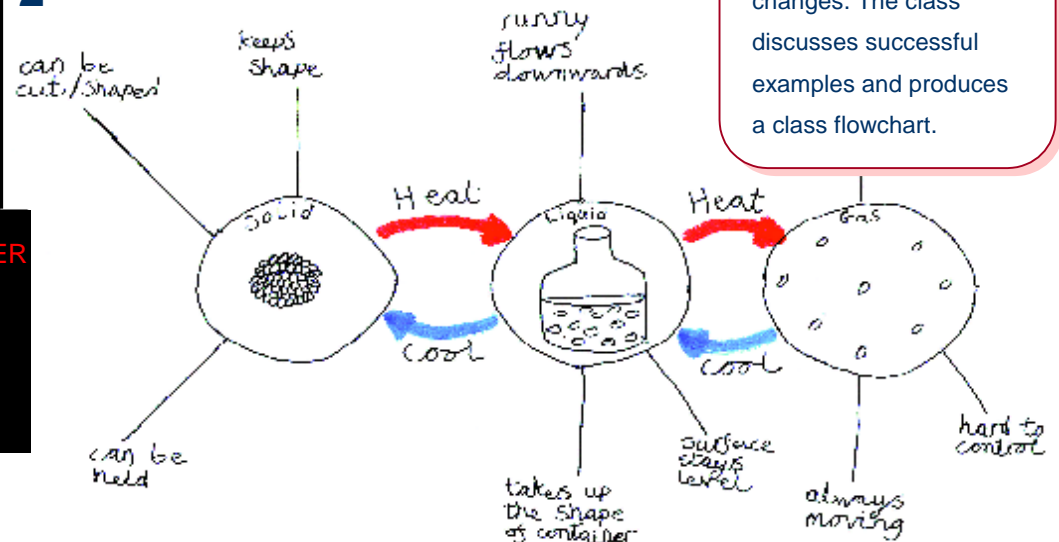
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3

Meanwhile, in Literacy Hour, they study examples of explanation text, concentrating on

- integration of visual and verbal information
- characteristics of explanatory language, especially the use of technical terms and causal connectives, e.g. *because*, *so*.

2



In pairs, pupils devise flowcharts to explain the changes. The class discusses successful examples and produces a class flowchart.

4

In independent writing, the pupils write an explanatory text based on the skeleton flowchart.

#### SOLIDS, LIQUIDS AND GASES

Materials are all made of tiny particles which are called molecules. When a material is a solid, the molecules are very close together so they do not move about. This means a solid keeps its shape and you can hold it, cut it or shape it.

Sometimes solids (like ice, wax or iron) can be changed into liquids by heating them. Heat makes the molecules more spaced out, so they can move about a bit. They are still close enough together to obey gravity, so they flow downwards. If you put liquid in a container, it flows into the shape of the container, but the top surface stays level.

All liquids (e.g. water) change into gases when you heat them, because the heat makes the molecules move far apart. They move about quickly in every direction, and they can be very hard to control. Gases are invisible.

If you cool these gases down again, they will be liquids. If you cool the liquids down they go back to solids.

## PLANNING PROGRESSION in writing explanation text

### Year 2 Term 2 T21

**Objective:** To produce simple flowcharts or diagrams that explain a process.

*Example*

**Shared writing:** Teacher demonstrates how to make simple illustrated flowchart based on topic-work, e.g. 'From seed to loaf of bread'.

**Individual/guided work:** Individual/guided work: Pupils make own similar flowchart, e.g. From seed to apple pie.

### Year 3 Term 2 T17

**Objective:** To make clear notes through use of simple formats, e.g. flowchart.

*Example*

**Shared writing:** Teacher models how to make notes on a flowchart to record processes in science (e.g. plant growth), geography (e.g. erosion), art, D&T, etc.

**Individual/guided work:** Pupils are encouraged to make own flowchart notes wherever appropriate.

### Year 4 Term 2 T24, 25

**Objective:** Write explanations of a process, improving cohesion through paragraphing, linking phrases and organisational devices.

*Example*

**Shared work:** Teacher demonstrates how to turn flowchart notes (e.g. muscles and movement) into an illustrated poster, with coherent text.

**Individual/guided work:** Pupils create flowchart notes for a process (e.g. water cycle) and convert it into illustrated poster.

### Year 5 Term 2 T22

**Objective:** Plan, compose, edit and refine short explanatory texts, using reading as a source, focusing on clarity, conciseness, impersonal.

*Example*

**Shared work:** Teacher demonstrates how to research and plan a page for a reference book on one aspect of a class topic. Shared note-making and writing of the page.

**Individual/guided work:** Pupils research, plan and write their own pages for the reference book.

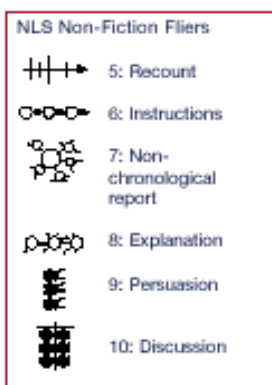
### Year 6 Term 3 T22

**Objective:** Select appropriate style and form to suit a specific purpose and audience, drawing on knowledge of different non-fiction text types.

*Example*

**Shared work:** Teacher (1) models how to select appropriate non-fiction text type for a piece of writing; (2) revises how to plan and write that text type, depending upon purpose and audience.

**Individual/guided work:** Pupils, given audience and purpose, select style and form for a range of pieces of writing, and plan and write one piece.



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## National Curriculum and NLS Objectives

The NLS objectives link with and support work in the rest of the curriculum in several ways. We can:

- Bring content knowledge and reading/writing activities from the curriculum into the Literacy Hour. Work in the Literacy Hour is then linked to real purposes for reading, writing, speaking and listening.
- Teach language and literacy in both the Literacy Hour and other subjects, weaving the work in subjects and the Literacy Hour explicitly together.
- Apply and practise the skills learned in the literacy hour in new contexts in the rest of the curriculum.
- Use language work done in other subjects to access children's English abilities.

## Linking QCA Units of Work and NLS Writing Objectives

In order to help with planning, links have been mapped between NLS objectives and existing writing activities within QCA schemes of work for history, geography, science, religious education and design and technology.

Visit the QCA website:



[www.qca.org.uk/ca/subjects/english/literacy](http://www.qca.org.uk/ca/subjects/english/literacy)