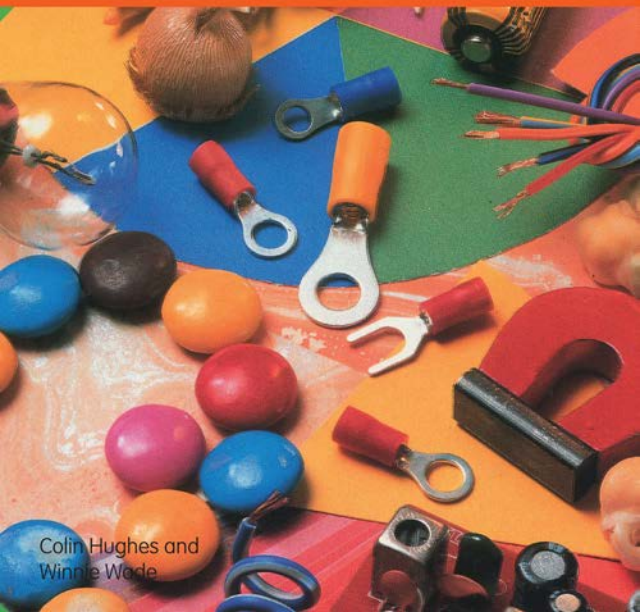


Ages: 7–11yrs

How to be Brilliant at Science Investigations



Colin Hughes and
Winnie Wade

Contents

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Colin Hughes
Winnie Wade

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Introduction

How to be Brilliant at Science Investigations contains 42 photocopiable sheets for use with 7-11 year olds. The activities as a whole help children to acquire the experimental and investigative skills required to conduct successful science investigations. They can be used whenever the need arises for particular activities to support and supplement your existing scheme of work for science. The activities provide learning experiences which can be tailored to meet individual children's needs.

The activities are addressed directly to the children. They are self-contained and many children will be able to work with little additional support from you. You may have some children, however, who have the necessary scientific skills and concepts, but require your help in reading the sheets.

The children should be encouraged to use the sheets for all aspects of communicating their work. Most of the activities require basic classroom science resources and these are listed in the 'What you need' box on each sheet. Some of the sheets require the use of an additional resource sheet. Where this is the case, an interactive link to the relevant sheet is provided.

Safety

Some safety notes are written on the sheets. In addition your attention is drawn to the following:

Mouldy Bread

Pour bleach or disinfectant on the mould culture to destroy it. Be careful when opening the jar not to release spores to the air. Soak the culture overnight. Seal it in a polythene bag before placing it in a dustbin. The glass containers may be washed after soaking and reused.

Keeping it hot, Investigating ice, How hot is it?, Investigating temperature change, How much will dissolve?

These activities require the use of thermometers. Only use spirit thermometers. Mercury thermometers should be not used because mercury is poisonous and it could be dangerous if the thermometer breaks.

It is recommended that you refer to the Association for Science Education's booklet *Be Safe!* for further safety advice.

Links to the National Curriculum

How to be Brilliant at Science Investigations relates directly to the programmes of study for Scientific Enquiry. The shading in the chart on the contents page shows which aspects of the Scientific Enquiry programme of study are addressed in each activity. The investigative focus of each activity is indicated with an 'x'.

The contexts for the investigations are derived from the programmes of study for Life Processes and Living Things, Materials and their Properties and Physical Processes. Each activity has also been coded (on the contents page) to indicate its main relationship with these aspects of the programmes of study.