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# ACTIVE ASSESSMENT



■ From the creators of concept cartoons

■ Suitable for Primary and Secondary Schools

**MHE**

Millgate House Education

## Thinking Learning and Assessment in Science

**STUART NAYLOR AND BRENDA KEOGH  
WITH ANNE GOLDSWORTHY**

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**Supplementary Resources Disclaimer**

Additional resources were previously made available for this title on CD. However, as CD has become a less accessible format, all resources have been moved to a more convenient online download option.

You can find these resources available here: [www.routledge.com/9781138420366](http://www.routledge.com/9781138420366)

Please note: Where this title mentions the associated disc, please use the downloadable resources instead.

# Contents

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## PART 1

Introduction	3
Assessment and learning	5
Assessment and teaching	9
Assessment and recording	13
Creating the right environment	15



## PART 2

Examples of active assessment strategies	19
------------------------------------------	----



## PART 3

References and bibliography	149
Related titles of interest	151





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# Index

## of assessment techniques and examples used

Page No	Assessment Technique	Activity 1	Activity 2	Additional Resources on CD
19	Card sort	Plant parts	Energy	
23	Cartoon strip sequence	Daytime shadows	Gas exchange	Blank worksheet
27	Classifying and grouping	Seed sort	Sorting materials- Solids, liquids and gases	
31	Concept cartoons	Muscles	Forces and pressure	With blank speech bubbles
35	Concept maps	Weather	Electric circuits	Incomplete concept map
39	Concept sentences	Melting and dissolving	Acids and alkalis	
43	Consumer report	Is it waterproof?	Conductors - Electrical and thermal	
47	Data: analysing data	Melting ice	Life in a compost heap	
51	Data: completing or creating tables	Testing threads	Enzyme activity	
55	Deliberate mistakes	Stretching tights	Germinating seeds	
59	Diary entries for a scientist	What are frogs?	Flat or round Earth?	Incomplete version
63	Drawings and annotated drawings	Movement of the sun	How we see	Examples without annotations
67	Games	Skeleton game	Snakes and ladders	Resources for the games

Page No	Assessment Technique	Activity 1	Activity 2	Additional Resources on CD
71	Graphic organisers: compare and contrast	Bird and bat	Photosynthesis and respiration	Blank grids
75	Graphic organisers: reasoning by analogy	Whale and submarine	Electric circuit and central heating	Blank grids
79	Graphic organisers: whole - parts relationship	Eagle	Circulatory system	Blank grids
83	Generating a set of instructions	Growing seeds	Separating Rock salt	
87	KWL grids	Teeth	Light	Blank grid
91	Writing a letter	Fred Bear's coat	Disposable cup	
95	Making a list	Push and pull walk	Light and sound comparison	Pull list
99	Matching exercises	Flower parts	Rock bingo	Bingo cards
103	News reports	Vanishing sugar - dissolving	Cosmic storm - Electron movement in metals	Blank layout
107	Odd one out	Light sources	Changes - physical and chemical	Blank grid
111	Posters	How cats see in the dark	Light bulb	Poster framework
115	Predict, observe, explain	Floating and sinking	Electric circuit	
119	Questions: generating questions	Sound and music	Van Helmont's experiment	Question stems
123	Questions: responding to questions	Light and shadows	Ready, steady cook! - Reversible and non-reversible change	
127	Sales pitch or advertisement	A home for a frog	Favourite metal	
131	Sequencing: statements, pictures and ideas	Change of state	Energy transfer	
135	Thought experiments	Falling stone	Predator-prey interaction	
139	True-False statements	Pushes and pulls	Earth and beyond	
143	Word definitions	Forces	Food chains	

# PART 1



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Introduction	3
Assessment and learning	5
Assessment and teaching	9
Assessment and recording	13
Creating the right environment	15





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# Introduction

## Active assessment in science

Part of a teacher's job is to assess pupils. It's included in the job description. However, even if assessment were not a requirement, good teachers would continue to assess pupils. They know that assessment informs them about what pupils have learnt, indicates what pupils may be finding difficult and helps them to adjust their teaching to maximise pupils' learning.

This book is about active assessment in science in primary and secondary schools. It is about how thinking, learning and assessment can be linked together in a creative and integrated fashion, so that thinking promotes learning, learning enables

assessment to take place and assessment acts as a stimulus to both thinking and learning. That may sound ambitious, but we believe that good teachers already do this. This book draws on this good practice to provide real guidance on how to go about it.

## Building on research

This book builds on recent research and guidance on assessment,

**“Thinking, learning and assessment can be linked together in a creative and integrated fashion.”**

especially that produced by Black and Wiliam (1998), the Assessment Reform Group (1999) and Black et al. (2002). These publications have been highly influential in raising the profile of

assessment and in offering guidance on how assessment can be made more effective. The principles that they put forward underpin our writing. We have

“ assessment acts as a stimulus to both  
thinking and learning.”

translated these principles into practical strategies that can be used in the classroom during science lessons.

### **Assessment and learning: research into practice**

Most of the book is therefore taken up with descriptions of practical strategies for assessment and learning in science. Each strategy is described in terms of:

- what it is
- how teachers can use it
- how it can help with assessment
- how it can help with learning

We have also provided illustrations of what these strategies might look like in the classroom, set in the context of different areas of science. A matrix in Part 3 provides an overview of the

strategies and the contexts in which they are set. For each strategy there are two illustrations. The first illustration is likely to be suitable for younger learners while the second illustration is for older learners. These illustrations are also provided separately on the accompanying CD ROM. The CD also provides additional resources and allows you to use a data projector to share the activity with the whole class and to interact with the text using the normal interactive white board facilities (such as highlighting ).

If you are intending to improve your understanding and practice in assessment in science and would welcome guidance on how to make it more creative and more effective, then this is the book for you.

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