

# SNAP SCIENCE



WRITTEN BY A TEAM OF  
CURRICULUM EXPERTS

SPECIFICALLY DEVELOPED  
FOR THE 2014  
CURRICULUM

"We've seen  
a new interest in science  
for the children and an  
excitement in their learning...  
I'm really thrilled for what  
it has done right the way  
across the school."

Alison Richards, Head Teacher,  
Hertingfordbury  
Cowper Primary School

THE DYNAMIC, COMPREHENSIVE  
**PROGRAMME**  
WITH EVERYTHING YOU NEED TO  
GET YOUR TEETH INTO  
PRIMARY SCIENCE



# WHAT IS SNAP SCIENCE?

With a wide range of interactive and visual digital resources, a flexible Teaching Framework, and built-in formative assessment, **Snap Science** will support you in delivering dynamic and exciting science lessons throughout your school.

*"Well considered and effectively presented, these resources are an absolute must"*  
– Teach Primary

**CULTIVATE A SPIRIT OF ENQUIRY** in your pupils with practical exploration and investigation activities to inspire the whole class

**ACCESS CLEAR PROGRESSION** within the 'big ideas in science' which are clearly visible within each topic and each module

**REVIEW, TRACK AND RECORD EVERY CHILD'S PROGRESS** - with complete coverage of all concepts and skills for the Teacher Assessment Framework, providing a comprehensive assessment solution

**MAKE CHALLENGING CONCEPTS MEANINGFUL FOR PUPILS** with carefully pitched activities and supporting videos and animations

**UTILISE SIMPLE SCIENCE SOLUTIONS** which support you in delivering engaging lessons and extend your subject knowledge

**HELP EVERY CHILD ACHIEVE** with three levels of differentiated challenge in every lesson

## MEET THE EXPERTS



### SERIES EDITOR: JANE TURNER

Jane Turner has been a primary school teacher, science outreach leader manager, LA consultant, CPD leader, and curriculum developer. Jane co-founded and is currently the Director of the Primary Science Quality Mark award scheme as well as working as Science Curriculum Advisor to the DfE Standards and Testing Agency.


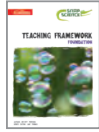













Jane's team of Snap Science authors, Chris Banbury, Nicola Beverley, Naomi Hiscock, Liz Lawrence, Bryony Turford, Hellen Ward, Christine Moorcroft and James de Winter are all highly experienced teachers who now work as consultants, LA advisers and in Initial Teacher Education.

**YOU CAN TRY SNAP SCIENCE WITH YOUR CLASS FOR FREE!**

**VISIT [WWW.COLLINS.CO.UK/SNAPSCIENCE](http://WWW.COLLINS.CO.UK/SNAPSCIENCE) TO SIGN UP TODAY!**



# HOW IS SNAP SCIENCE STRUCTURED?

YEAR GROUP/ COMPONENT	TEACHING AND ASSESSMENT TOOLKIT*	TEACHING FRAMEWORK	ASSESSMENT YEARS 1-6:
	Delivered online via Collins Connect Platform 1 year subscription is £84.00 + VAT 3 year subscription is £200.00 + VAT	Black and white, spiral bound, A4	Digital download
Foundation			
	1 Year 978-0-00-812472-4 3 Year 978-0-00-812473-1	978-0-00-812474-8 £68.00	
Year 1			
	1 Year 978-0-00-756249-7 3 Year 978-0-00-757445-2	978-0-00-755141-5 £120.00	
Year 2			
	1 Year 978-0-00-756250-3 3 Year 978-0-00-757449-0	978-0-00-755142-2 £120.00	
Year 3			
	1 Year 978-0-00-756251-0 3 Year 978-0-00-757452-0	978-0-00-755143-9 £120.00	978-0-00-819933-3 £105.00 + VAT
Year 4			
	1 Year 978-0-00-756252-7 3 Year 978-0-00-757453-7	978-0-00-755144-6 £120.00	
Year 5			
	1 Year 978-0-00-756253-4 3 Year 978-0-00-757454-4	978-0-00-755145-3 £120.00	
Year 6			
	1 Year 978-0-00-756254-1 3 Year 978-0-00-757455-1	978-0-00-755146-0 £120.00	

\*Includes Teaching Framework and assessment materials.

# EASY TO IMPLEMENT

With easy-to-use planning at the heart of the resource, **Snap Science** is easy to implement across your school.

Flexible lesson plans allow you to plan effectively for the needs of your class and the supporting digital assets mean you have everything you need for an outstanding science lesson at your fingertips. Each lesson is teeming with enquiry based, hands-on activities incorporating a range of digital resources to ensure every lesson is rich, lively and engaging.

**"I love using it... as soon as you approach a topic you have the knowledge, and you feel so supported."**

Lorraine Hemmens, Deputy Head/  
Year 6 Teacher, Hertingfordbury Cowper  
Primary School

Every lesson begins with a question – providing a focus for children to explore and think about

Prompt questions are included throughout to develop and assess children's understanding

**MODULE 2**

## THE APPRENTICE GARDENER

### LESSON 1: WHAT WILL THE SEEDS GROW INTO?

**LESSON SUMMARY:**  
This lesson builds on work from Year 1. In this lesson children use their observations to describe and identify seeds. By the end of this lesson they recognise that different seeds grow into different plants.

**Preparation required:**  
Use the images provided (Slideshow 1) or your own photos to create an identification slide for the selection of seeds that you are using.

**Key vocabulary:**  
seeds, plants, apprentice, gardener, grow, observations, describe, identify, expert

**Resources:**  
Sets of 8–10 seeds (one set between two children), sets of six different bean seeds (in seed packets or dried beans for cooking), sticky tape, colouring pencils

**Health and safety:**  
Avoid handling seeds that may have been treated using poisonous pesticides – choose seeds that are untreated (for example, food quality, organic, or harvested or collected by you) for activities where children handle them. Do not use seeds from hazardous plants. See Be Safe!, section 4.

**National curriculum links:**  
Observe and describe how seeds and bulbs grow into mature plants

**Learning intention:**  
To identify which seeds will grow into which types of plants

**Scientific enquiry type:**  
Grouping and classifying

**Working scientifically links:**  
Observing closely, using simple equipment

**Success criteria:**

- I can make observations of different types of seeds.
- I can use my observations to describe and identify seeds.
- I can suggest what might help the seeds to grow.
- I can match the seed to the type of plant it will grow into.

**EXPLORE:**  
Show children the variety of seeds.  
Ask: *What are these? Where do they come from? What are they for?*  
Draw on children's prior learning to help establish that the objects are all seeds that come from plants. Explain that although many types of seeds provide food for animals, including humans, their main purpose is to grow into new plants.  
Explain to children that in this module they are going to become apprentice gardeners, learning how to grow plants from seeds. Explain that during the module they will need to ask and answer lots of questions in order to find out the information that they need to know. Let them know that at the end of the module they will have enough information in the class gardening book to be able to plant a garden and grow vegetables to eat.  
Prompt children's thinking by explaining that, as gardeners, they need to decide what to grow.  
Ask: *Will all these seeds grow into the same type of plant? Will all the seeds that look the same grow into the same type of plant? How can we find out what they will grow into?*  
Children may suggest planting the seeds and waiting to see what they grow into or asking someone who knows, or looking in books or on the internet to find out. Explain to them that you need to know what the seeds will grow into before you plant them.  
Let children know that you have a chart that will help them to identify the seeds, but that they first need to make very careful observations. Provide each pair of children with a selection of seeds and magnifiers. Ask them to look closely at the seeds and to discuss what words they can use to describe them. Create a list of the words that children use.  
Display the Seed identification slide (Slideshow 1), which you will have modified to include the seed types that you have available. Challenge children to describe a seed in enough detail so that the rest of the class can identify it. Encourage them to refer to the vocabulary list.

**ENQUIRE:**  
Explain to children that they are now going to work individually to describe and to identify seeds. The challenges are differentiated by the detail required in the description.

**Challenge 1:** Children describe and identify contrasting seeds into a piece of paper folded into four sections. Ask the children to choose four contrasting seeds and to tape them onto a piece of paper folded into four sections. Ask them, for each seed, to write the words that describe it, and then to use the identification sheet (a printed out copy of slide 1 of Slideshow 1) to name it.  
When the children have finished, ask them to check their work by reading it to a partner, who tries to pick out the correct seeds from the descriptions. As the children are working, encourage them to refer to the vocabulary list.  
Ask: *How is this seed different from the others? What features will help you to identify it?*

**Challenge 2:** Children describe, draw and identify seeds.  
Ask the children to choose four seeds and to fold their paper into four sections. Explain that in each section they should write a description of one of their seeds, leaving enough space for a drawing. On the back of the paper, in the same section, they should write the name of the seed.  
When the children have finished their descriptions, provide them with coloured pencils and ask them to swap sheets with a partner who uses the description to draw the seed. When they have finished their drawings they should look at the seed names on the back of the sheet and check how well the description and the drawing match the actual seed.  
As the children are working encourage them to refer to the vocabulary list.  
Ask: *What features are particular to this seed? What information will your partner need to be able to draw it accurately? Does the drawing match the description? Could you use this description to choose the right seed? Could you use this drawing to choose the right seed?*

**Challenge 3:** Children create a seed identification sheet.  
Provide the children with six different types of bean seeds in seed packets or in labelled bags. Ask the children to fold a piece of paper into six sections and in each section to write the name of the type of bean and to describe it.  
When they have finished the descriptions, encourage the children to check their work by reading each description to a partner who tries to identify the correct seed.  
As the children are working, prompt them to think about the differences and similarities between the seeds.  
Ask: *In what ways are these seeds different? How might these seeds be confused with each other?*

**REFLECT AND REVIEW:**  
Explain to children that during the next few weeks they will be planting some of the seeds that they have identified. Ask each child to draw and label a picture to show what they think a seed needs for it to start growing. Information from this task will help you to decide which investigations need to be carried out later in the module.  
After the lesson, make a floor book and add to the first page examples of seed identification and what a seed needs to grow.

**EVIDENCE OF LEARNING:**  
Do children know that seeds come from plants and that they will grow into new plants? Do they recognise that different types of seeds grow into different plants and that the same type of seed will produce the same plant? Can they make close observations using magnifiers? Can they describe what they observe? Can children match descriptions to the seeds? Can they write descriptions that enable others to draw or identify the seeds? Do they know what seeds need in order to start to grow?

32

33

Each lesson links directly to the Programme of Study and the Working Scientifically criteria

Each lesson contains three levels of differentiated challenge to ensure all children can access and master the lesson's learning intention

Collins Connect

# COLLINS CONNECT - YOUR ONLINE PLATFORM FOR SNAP SCIENCE

Snap Science digital resources are brought to you via our innovative online teaching platform, Collins Connect.

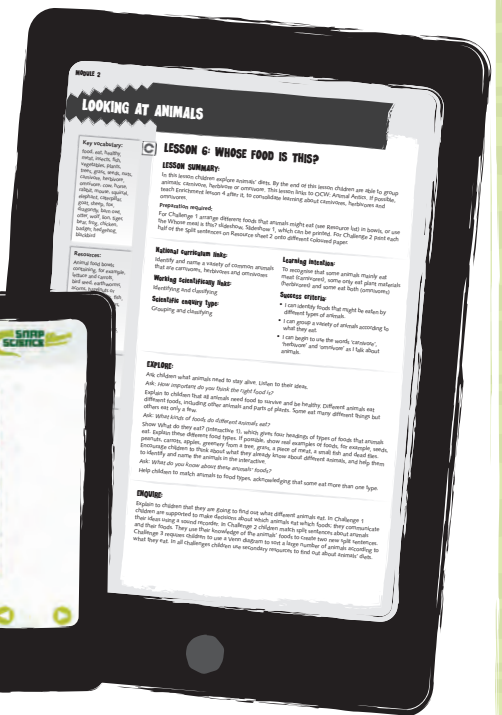
Collins Connect provides teachers with:

- tailored animations
- videos
- slideshows
- interactive activities
- resource sheets
- editable lesson plans teeming with enquiry based, hands-on activities
- online record-keeping

Simple and easy-to-use, it offers teachers the flexibility to design their own teaching plan to suit the needs of their class and brings every lesson to life!

"The treasure trove of online videos, animations and interactive activities really help to engage pupils and bring the scientific concepts to life."

Teach Primary



INTERESTED IN COLLINS CONNECT?  
Sign up for a free 14 day trial at  
[www.connect.collins.co.uk](http://www.connect.collins.co.uk)

[www.collins.co.uk/SnapScience](http://www.collins.co.uk/SnapScience)

# EFFECTIVE ASSESSMENT

In a world without levels, **Snap Science** does all the hard work for you. Developed with in-depth formative and summative assessment at its core, **Snap Science** offers simple, yet robust tools for judging and recording whether a child is working at, towards or exceeding the expected standard.

Ongoing formative assessment opportunities are built into every lesson plan, along with guidance to enable teachers to use what a child has said, written, made or drawn in a lesson to confidently assess their learning.

For every concept and skill in the Teacher Assessment Framework, a Snapshot assessment task will help you to review a child's learning and whether they are working at the expected standard.

**Snap Science Assessment Works alongside ANY Primary Science Programme!**

**"It very much focuses on activity based lessons, so a lot of the formative assessment is through questioning which is fantastic because you definitely get more of an understanding on whether children understand."**

Kate Atkinson, Year 4 Teacher, Hertingfordbury Cowper Primary School



Snapshot assessments are short, fun activities that a teacher or other adult can use with a child or small group of children to check understanding of National Curriculum Programme of Study for Science concept statements:

Each Snapshot has four elements:

1. The activity resources (images, cards, etc. that adults will need to prepare)
2. Instruction for the adult leading the activity
3. Questions for adults to use to check and probe understanding
4. Guidance for adults to assess that a child has achieved the Programme of Study statement



Snap Science Assessment Years 1-6 is available as a digital download, for more information visit [collins.co.uk/SnapScience](http://collins.co.uk/SnapScience)



# RECORD-KEEPING FOR SNAP SCIENCE

Within the Progress Tracker you can view class results by module and see these in chart form

The **Snap Science** Record-Keeping tool is an adaptable tracking and reporting system containing all the data you need to make your final teacher assessment judgments at the end of a Key Stage.

Select a traffic light for each child for each curriculum statement:

- green** = mastery achieved and exceeded
- amber** = mastery achieved
- red** = mastery not yet achieved

At any time you can easily view and export the data by pupil, by module or by curriculum statement in grid or pie chart form – ideal to take to parents' evening or to show to Ofsted.

Easily drag-and-drop pupils into the relevant mastery section and add comments to those not achieving and those exceeding



# SNAP SCIENCE FOUNDATION

**EYFS**

**Snap Science Foundation** provides a solid grounding into the introductory principles of science. It covers the requirements of the 2014 Early Years Foundation Stage, and prepares children for the Year 1 curriculum through first-hand experience of the world around them.

Snap Science Foundation contains 24 flexible activity plans. Each activity plan is accompanied by a slideshow of a short fictional story based on meaningful science that leads to a problem or question for pupils to answer. Downloadable resource sheets and photo banks are also available for each plan, saving you time and effort.

Assessment for learning is embedded throughout the Foundation year, building on the core strength of **Snap Science**.



## HOW DO I FIND OUT MORE ABOUT SNAP SCIENCE?



Find out more and download free samples – [www.collins.co.uk/SnapScience](http://www.collins.co.uk/SnapScience)

Trial **Snap Science** on Collins Connect for free – [connect.collins.co.uk](http://connect.collins.co.uk)

Contact your local sales representative for a free demonstration or to order a subscription to Collins Connect, [findarep.collins.co.uk](http://findarep.collins.co.uk)

🐦 @Collins Primary 📘 Collins Primary Blog: [freedomtoteach.collins.co.uk](http://freedomtoteach.collins.co.uk)

Sign up to receive Collins Primary email newsletters: [www.collins.co.uk/email](http://www.collins.co.uk/email)



Title	ISBN	Price	Order Qty
1 Year subscription to Snap Science on Collins Connect Foundation	978-0-00-812472-4	£84.00 + VAT	
3 Year subscription to Snap Science on Collins Connect Foundation	978-0-00-812473-1	£200.00 + VAT	
Teaching Framework Foundation	978-0-00-812474-8	£68.00	
1 Year subscription to Snap Science on Collins Connect Year 1	978-0-00-756249-7	£84.00 + VAT	
3 Year subscription to Snap Science on Collins Connect Year 1	978-0-00-757445-2	£200.00 + VAT	
Teaching Framework Year 1	978-0-00-755141-5	£120.00	
1 Year subscription to Snap Science on Collins Connect Year 2	978-0-00-756250-3	£84.00 + VAT	
3 Year subscription to Snap Science on Collins Connect Year 2	978-0-00-757449-0	£200.00 + VAT	
Teaching Framework Year 2	978-0-00-755142-2	£120.00	
1 Year subscription to Snap Science on Collins Connect Year 3	978-0-00-756251-0	£84.00 + VAT	
3 Year subscription to Snap Science on Collins Connect Year 3	978-0-00-757452-0	£200.00 + VAT	
Teaching Framework Year 3	978-0-00-755143-9	£120.00	
1 Year subscription to Snap Science on Collins Connect Year 4	978-0-00-756252-7	£84.00 + VAT	
3 Year subscription to Snap Science on Collins Connect Year 4	978-0-00-757453-7	£200.00 + VAT	
Teaching Framework Year 4	978-0-00-755144-6	£120.00	
1 Year subscription to Snap Science on Collins Connect Year 5	978-0-00-756253-4	£84.00 + VAT	
3 Year subscription to Snap Science on Collins Connect Year 5	978-0-00-757454-4	£200.00 + VAT	
Teaching Framework Year 5	978-0-00-755145-3	£120.00	
1 Year subscription to Snap Science on Collins Connect Year 6	978-0-00-756254-1	£84.00 + VAT	
3 Year subscription to Snap Science on Collins Connect Year 6	978-0-00-757455-1	£120.00 + VAT	
Teaching Framework Year 6	978-0-00-755146-0	£120.00	
NEW Snap Science Assessment Years 1-6: Digital Download*	978-0-00-819933-3	£105.00 + VAT	

P&P £4.95

Total £

## How do I place a Snap Science order?

Return your completed order form to:

**Collins, FREEPOST, RTKB-SGZT-ZYJL, Honley, HD9 6QZ**

Email: [education@harpercollins.co.uk](mailto:education@harpercollins.co.uk) with your order, quoting **SNA1801**

Tel: **0844 576 8126\***

Fax: **01484 665736**

\*Calls will cost you 7p per minute plus your phone company's price per minute access charge.

### INTERNATIONAL SCHOOLS:

Please email

[collins.international@harpercollins.co.uk](mailto:collins.international@harpercollins.co.uk)

or phone **+44 141 306 3484**

### Terms and Conditions:

Evaluation Terms: Evaluation copies are available for UK Educational Establishments to look at for 30 days. All evaluation orders are supplied with a 30-day invoice. After 30 days, you can either purchase the product or return it in a resalable condition via the returns system at [collins.returns.education.co.uk](http://collins.returns.education.co.uk).

### Prices:

Prices are correct at the time of going to press. Collins reserves the right to change these prices without further notification. Offers are not available in conjunction with any other offer and while stocks last. Prices listed are without VAT. VAT is applicable to software and digital subscription products and is applied at the current rate. There is no VAT on books.

### Postage and Packing:

Evaluation Copies are supplied free of charge. Firm Orders: UK Postage: £4.95

### YOUR DETAILS:

Position:

School Name and address:

Postcode:

Telephone:

Email: