



Year 5, Earth and Space Unit

Inspiring future scientists and progressing their knowledge

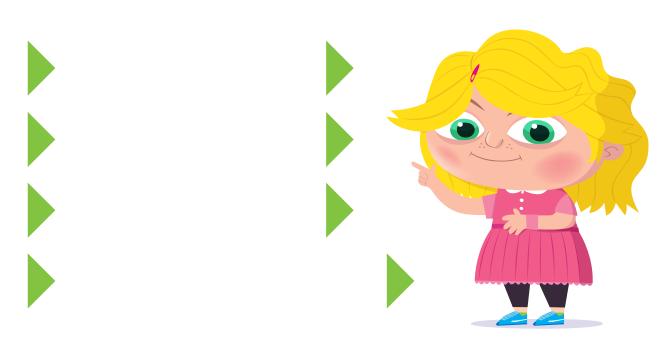
Year 5 Sample Unit



Welcome!

This free sample unit is from the **Year 5 Earth and Space Unit** in Science Bug.

This particular unit is an example of one of the "Quest" units in Science Bug. These are open-ended units where children are given a problem-solving quest to complete. Click on the links below to open resources.



Assessment Toolkit





What is Science Bug?

Science Bug is a proven comprehensive and coherent programme, both available online and in print, for curious kids.

It's been written for the primary science programme of study by an expert author team, to help you spark imagination, fuel curiosity and nurture inspired and confident young scientists.

As a **Science Bug** member, you would access all of your Science Bug plans and resources in the online Teacher Toolkit. From the toolkit, you can export the plans, personalise them, and print them off.

All of the resources and activities that you would use to support each lesson, such as Interactive Teaching Resources and Photocopiable Masters, are hyperlinked in every plan so you can access them at the click of a button, whether you're at home, school or on the move.

What's in Science Bug?

Guidance and

support on key science concepts

Teacher Toolkit

Everything you need online and in one place to help you inspire confident, young scientists.

Inspiring plans, activities and tools



Built-in differentiation and assessment opportunities

> All iPad friendly and can be allocated to children for revision at school, or at home!

Practical investigations, and outdoor learning to get kids doing science with their own hands



Interactive Teaching Resources containing videos, animations and fun, interactive activities



Pupil Books

Beautifully designed Pupil Books for independent work and science skill preparation.



Summative Assessment Toolkit



Professional Development

Inspirational and practical in-school course to familiarise you with your Science Bug toolkit and the new science programme of study.



Access to a pupil reward world!





We believe that to instill **scientific confidence** in children and to **inspire future generations of young scientists**, we need to spark their imagination and fuel their curiosity with hands-on, experiential science. But just as importantly, we need **inspiring teachers at the helm** to bring it all to life.

A challenging and complete curriculum programme from Year 1 to Year 6, Science Bug:

- is designed, tested and proven with kids across the country in a range of settings, and packed with fun, hands-on activities, videos and animations.
- is built on a really robust teaching and learning cycle that will ensure all children progress in their learning.
- provides support and guidance to use in a way that's right for you, personalised to the needs of your school and setting with tools and suggestions to inspire your science teaching.

Knowledgeable and confident teachers

Inspired, confident young scientists

Challenging, acccessible, awe-inspiring science

The Science Bug teaching and learning cycle

Introduction and knowledge capture

- Scene setting
- Informal assessment of children's initial ideas



Develop understanding

- Teach using real-life examples
- Practical work and stimulating activities

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Reflect, review and summative assessment

- Children present their learning in a variety of ways
- Children look back to initial ideas and recognise what they have learned



Apply understanding

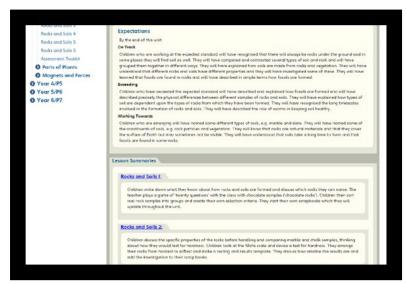
 Children use knowledge and skills to carry out an investigation or to apply to a situation

Formative assessment is built in throughout the lessons along with examples of evidence to check children's understanding.

Assessment in Science Bug

Formative and summative assessment is at the heart of the **Science Bug** teaching and learning cycle, so you'll find opportunities for assessing progress woven throughout:

- ✓ Unit overviews and learning expectations set the scene for what children will have learnt by the end of a unit.
- ✓ 'Knowledge capture' activities help you assess children's knowledge at the start of a unit.
- Regular opportunities for children to reflect on their learning allows for formative assessment throughout.
- ✓ End-of-unit activities encourage children to explore what they've learnt, and how their ideas have changed and why.
- ✓ **Summative assessment toolkits** have written and practical tasks to help give you an overall judgment of children's attainment alongside your formative judgments.







How is Science Bug organised?

To support you in delivering the science programme of study and to free you up to focus on what you do best, we've woven together the **working scientifically skills** and the **knowledge objectives** to form **six half-termly units per year group**.

Year 1/P2

- Parts of animals
- Changing seasons
- Plants
- Comparing materials
- Types of animals
- Identifying materials

Year 2/P3

- Living things
- Uses of materials
- Growing plants
- Changing shape
- Habitats
- Feeding and exercise

Year 3/P4

- Movement and feeding
- Light and shadows
- What plants need
- Rocks and soils
- Parts of plants
- Magnets and forces

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Year 4/P5

- Dangers to living things
- Electricity
- Human nutrition
- Sound
- Grouping living things
- Changes of state

Year 5/P6

- Life cycles
- Earth and space
- Separating mixtures
- Types of change
- Materials
- Forces

Year 6/P7

- Our bodies
- Light and sight
- Classifying living things
- Changing circuits
- Evolution and inheritance
- Review and celebration



This list of units is in the same order that they are laid out in the National Curriculum, but is not a reflection of the order they need to be taught.

