From the UK’s no.1 KS3 science publisher*, Activate for the AQA KS3 syllabus

AQA Activate for KS3 has been specifically tailored to the new AQA KS3 Syllabus and Big Ideas principle, while retaining Activate’s most popular features including maths and literacy support, Checkpoint lessons and the widely-adopted assessment model. It helps prepare your students for using AQA GCSE Sciences Third Edition (9–1) resources at KS4. AQA Activate for KS3 Student Books are approved by AQA.

Prepare for the new AQA (9–1) GCSEs

Summary and practice questions with GCSE command words, as well as extended writing tasks and maths and practical skills are incorporated throughout, to help your students build confidence as they approach the new (9–1) GCSEs.

Engage your students

Engaging and inquisitive, packed full of fun activities, practicals, quizzes and questions to spark your students’ interest in science.

Build key skills

Maths, literacy and enquiry processes are embedded throughout, with progression of skills carefully planned, and supported by tasks and assessments to help monitor progress.

Assessment you can trust

AQA Activate for KS3 assessment has been designed to allow everyone to reach the required level of understanding. Follow-up lessons are provided, with support and extension tasks designed to allow everyone to reach the required level of understanding. Use the checkpoint system to help all your students make progress and are ready for the challenges of the curriculum ahead.

Find out more online

Find more information and sample material from AQA Activate for KS3 at www.oxfordsecondary.co.uk/aqaactivate.

Covering the AQA KS3 Science Syllabus

The AQA KS3 Science Syllabus is split into two parts, and can be taught as part of a two-year or a three-year KS3. AQA Activate Student Book 1 covers Part 1 of the AQA Syllabus, and AQA Activate Student Book 2 covers Part 2. Part 1 can be taught in Year 7 or Year 7/8, and Part 2 in Year 8 or Year 8/9. The Student Books are accompanied by a bank of online resources and assessment on Kerboodle. The Student Books have been approved by AQA for the KS3 Science Syllabus.

Evaluate AQA Activate for KS3 free for 30 days

The AQA Activate for KS3 Evaluation Pack (978 019 841361 5) contains a copy of the AQA Activate for KS3 Student Book 1, Teacher Handbook samples and a guide to Kerboodle.

Kerboodle is not part of the AQA approval process.

 KS3 and KS4 assessment

Our expert Assessment Editor Dr Andrew Chandler-Grevatt has devised a flexible five-year assessment package you can use for the new AQA KS3 Science Syllabus and AQA 9–1 GCSE. Track your students’ progress seamlessly through KS3 and KS4 to ensure GCSE success.

The AQA Activate for KS3 bands, Know, Apply and Extend, allow you to monitor progress against what’s required by the KS3 programme of study and AQA KS3 Syllabus. They are also matched to the new GCSE grading system (9–1), to ensure seamless transition to KS4.

Targeted intervention and extension with our Checkpoint system

The checkpoint assessment system assesses students at the end of each Big Idea, helping to ensure that all students achieve their full potential. Follow-up lessons are provided, with support and extension tasks designed to allow everyone to reach the required level of understanding. Use the checkpoint system to help all your students make progress and are ready for the challenges of the curriculum ahead.
In this Big Idea you will learn about how these organisms are pollinated to fertilisation, and finally to germination.

Pollen needs to be transferred between plants so that seeds can grow into new plants. Pollination can happen naturally, or it can be pollinated by animals like bees. When pollen lands on the stigma of a flower, it grows down the style to the ovule, where it fertilises the egg cell and the polar nuclei. This process is called fertilisation. The ovule then develops into an ovary, which eventually becomes a fruit. The remaining part of the flower, the calyx, falls off.

Detectives have used chromatography to separate mixtures of dyes. In this chromatogram, the blue dye has moved further than the yellow dye. This might be because the blue dye mixes better with the water than the yellow dye. Or it might be because the yellow dye is more soluble in the paper than the blue dye. This separation is due to the difference in solubility of the dyes in the paper.

Aidan grinds up a spinach leaf in a pestle and mortar. He puts a green spot of spinach juice near the bottom of some chromatography paper. Aidan places the paper in a beaker containing water and allows it to move up the paper. The separated dyes make a chromatogram. The colors are different because each pigment is a different nutrient.

Pegasi b and Earth. How would life there be different? In the Pegasi b system, there are two planets orbiting a star, Pegasi b. The planet Pegasi b has a mass similar to Earth, but it is much closer to the star. This means that the planet is much hotter than Earth.

In this chromatogram, the blue dye has moved further than the yellow dye. This might be because the blue dye mixes better with the water than the yellow dye. Or it might be because the yellow dye is more soluble in the paper than the blue dye. This separation is due to the difference in solubility of the dyes in the paper.

How do organisms interact within an ecosystem? In this Big Idea you will learn about how these organisms are pollinated to fertilisation, and finally to germination.

Some singers can sing higher-pitched notes than others. The frequency of a sound wave is measured in hertz (Hz) or cycles per second. A higher frequency means a higher pitch. A lower frequency means a lower pitch. Some singers can sing higher-pitched notes than others. The frequency of a sound wave is measured in hertz (Hz) or cycles per second. A higher frequency means a higher pitch. A lower frequency means a lower pitch.

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What frequencies can other animals hear? Humans can hear a particular range of frequencies, called the auditory range. You have the biggest auditory range when you are young. Your auditory range changes as you get older. You will find it more difficult to hear high-frequency sounds. The frequency range is different for different animals. Some animals can hear frequencies above 20 000 Hz. These are called ultrasound. Frequencies above 20 000 Hz are called ultrasound. Frequencies in the range of 20 000 Hz to 20 000 000 Hz are called infrasound. Frequencies below 20 Hz are called infrasound. Frequencies below 20 Hz are called infrasound.
AQA Activate for KS3 is accompanied by Kerboodle, an online bank of teaching material for running creative and effective lessons, with a flexible, fully integrated assessment model and solution for KS3 assessment without levels. It’s intuitive to use, customizable and can be accessed online anytime, anywhere.

Assessment

Auto-marked assessment

Auto-marked assessments with confidence selectors and targeted feedback help assess:
- Content from the chapter
- Maths skills
- Literacy skills (including spelling)
- Enquiry processes
- KS2 knowledge

You can assign assessments to students at home and track their progress in the Kerboodle markbook.

Check your students’ knowledge of KS2
- Downloadable paper-based tests assess your Year 7 students’ knowledge and understanding of KS2
- Follow-up lessons help with intervention and extension

Make progress with key skills
- Progress tasks for the end of each chapter help monitor progress and set targets in key skill areas
- Progress trackers help students track progress and record areas for improvement
- Interactive investigations and progress quizzes provide auto-marked assessment of skills for each chapter
- Paper-based end-of-Big Idea tests are easily downloadable to help assess students’ progress at the end of each Big Idea

Prepare for the AQA 9–1 GCSEs
- Maths and practical skills are embedded throughout to help prepare students for GCSE
- Exam-style question papers build confidence in GCSE-style questions and provide accurate summative marks for the end of each Big Idea, and at the end of the year

Follow assessment with learning

AQA Activate for KS3 includes a Checkpoint assessment system.
1. Use the auto-marked Checkpoint assessment at the end of each Big Idea to determine next steps
2. Use the Checkpoint lesson and resources to support and extend your students as needed

After having looked at all the schemes available for the new KS3 National Curriculum, Activate has by far the best thought out assessment package.

Mat Power, Head of Science, Holy Cross Catholic High School

Kerboodle is not part of the AQA approval process.
Kerboodle is not part of the AQA approval process.

Lots of flexibility and complete support for KS3. I can see that teachers and students will really enjoy using it in class!

Guy Winters, Head of Science, Cardinal Newman Catholic School on Activate

Resources

Every lesson is accompanied by teacher notes to help support lesson delivery.

WebQuests build literacy and research skills, and can be used as homework tasks.

Interactive screens are provided for every lesson use on your whiteboard.

AQA Activate for KS3 Kerboodle: Lessons, Resources and Assessment

Kerboodle

Lessons

Ready-to-play lesson presentations are provided to complement every double page spread in the Student Book. Each lesson presentation is fully customizable, meaning you can edit, add, or delete screens to suit your needs.

To find out more about AQA Activate for KS3 Kerboodle, visit www.oxfordsecondary.co.uk/aqaactivatekerboodle

Practicals and activities, including extension tasks and technician notes

Teacher and technician notes are provided in a single easy-print file on Kerboodle, so you can print-off everything you need with a single click.

Question-led activities to help students explore the answer to a 6-mark question

Sound and energy transfer activities

Big Question

Compare the time it takes light to travel around the world with the time it takes sound to travel the same distance. The distance around the equator is about 40,000 km. (6 marks)

What I need to know

Use your knowledge of distances and speeds to draw conclusions and design a simple experiment to test the speed of light and sound. Calculate the time taken for light and sound to travel the same distance.

Support sheet

The support sheet contains a table for students to record their observations.

Activity

This resource sheet may have been changed from the original.
**BIG IDEAS**

- The Big Ideas principle puts generalisations, principles and models which connects concepts at the heart of the syllabus, complementing the KS3 Programme of Study by exploring the links between ideas at KS3
- There are 10 Big Ideas: Forces, Electromagnetism, Energy, Waves, Matter, Reactions, Earth, Organisms, Ecosystems and Genes

**ASSESSMENT**

- The AQA KS3 Science Syllabus is based on a mastery approach to students’ understanding
- Uses mastery goals ‘Know,’ ‘Apply’ and ‘Extend’
- Prepares students for following the AQA GCSE 9–1 specifications at KS4
- Five-year assessment model by Dr Andrew Chandler-Grevatt is matched to the AQA ‘Know,’ ‘Apply’ and ‘Extend’ bands
- Matched to the new AQA GCSE 9–1 grades for seamless progression from KS3 to GCSE

**ENQUIRY PROCESSES**

- Enquiry processes cover the working scientifically skills required by the Programme of Study
- Enquiry is divided into four areas: Analyse, Communicate, Enquire, Solve
- Enquiry processes and working scientifically are embedded throughout to develop the required key skills

**PREPARATION FOR 9–1 GCSEs**

- The AQA KS3 Science Syllabus has been specifically designed to develop the required competencies for the AQA GCSE 9–1 specifications at KS4
- AQA command words and exam-question skills are embedded throughout
- Big Ideas Checkpoints provide intervention and extension to ensure students enter KS4 with the required proficiency
- Designed to progress into AQA GCSE Sciences (9–1) Third Edition resources for GCSE

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**About the Assessment Editor**

Dr Andrew Chandler-Grevatt

Dr Andrew Chandler-Grevatt has a PhD in school assessment, and a real passion for science teaching and learning. Having worked as a science teacher for ten years, of which five were spent as an AST, Andy has a real understanding of the pressures and joys of teaching in the classroom. Alongside his national and international research in school assessment, Andy is a teaching fellow on the PGCE course at the University of Sussex, and is a successful published assessment author.

Find out more about Andy and the AQA Activate assessment model at www.oxfordsecondary.co.uk/aqaactivate.
## Course structure

### Year 7 Or Year 7/8

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<tr>
<th>Student Books</th>
<th>Teacher Handbooks</th>
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The Student Books (print and digital) have been approved by AQA. Other resources shown here are not part of the AQA approval process.

**COMING SOON:**

AQA Activate Workbooks and digital Teacher Handbooks on Kerboodle

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