

Evolving

5-19

Biology



summary for

**awarding
bodies**



Royal Society of
Biology

What is the purpose of this summary document?

This summary document is an introduction for Awarding Bodies, highlighting the relevant aspects of the RSB **5-19 biology curriculum framework**.

What is the Royal Society of Biology (RSB) proposing?

The RSB has developed a 5-19 biology curriculum framework as a way of influencing future policy. The curriculum framework and recommendations have been informed by research and evidence and with the involvement of a range of experts including: assessment and curriculum development specialists, bioscience higher education representatives, education researchers, initial teacher training representatives, primary teachers, secondary teachers, students and representatives from industry.

The Royal Society of Biology's (RSB) 5-19 biology **curriculum framework**:

- provides an organisational framework and recommendations for the design of the school biology curriculum
- summarises the RSB's expectations for what young people should learn between the ages of 5-19, and is accompanied by detailed exemplifications of the framework for the age ranges 5-11, 11-16 and 16-19.
- formalises the RSB's position on approaches to designing a biology curriculum
- is intended to be used during future curriculum reviews to inform the design and development of biology curricula for general, technical and vocational courses taken by young people

The framework suggests how the content of the biology curriculum could be organised to explore seven **big questions** of biology. Answers to the big questions are built up by developing young people's understanding in 23 key **themes** spanning three **dimensions** of biological science.

The three '**dimensions**' to the biology curriculum framework:

- **Practices of Biology** (Biology as a Science)
- **Core concepts of biology** (Core concepts of Biology)
- **Applications of Biology** (Biology in the world)

Why have the Royal Society of Biology (RSB) developed a curriculum framework?

This framework shows improved **progression** from age 5-19 and improved coherence between themes, in comparison to that found as part of an exercise mapping the existing national curriculum statements from across UK curricula against RSB's big questions of Biology. An example of this mapping exercise can be found in this article '**Developing a Framework for the Biology Curriculum**'

The framework is designed to inform the development of a broad and balanced 5-19 biology curriculum. It is intended to be used during future curriculum reviews to guide the organisation and development of biology curriculum policy and guidance documents that will be the basis for **general, technical and vocational courses** for young people up to age 19. We expect that courses leading to general qualifications (e.g. GCSE and A level courses in England, Wales and Northern Ireland, and National and Higher courses in Scotland) will develop pupils' understanding across all seven big questions and 23 themes of the framework. Technical and vocational courses may focus on particular big questions or sets of themes. The RSB's framework and recommendations have been designed to be sufficiently future-proof to reduce the need for regular updates of the curriculum and the disruption this causes in schools.

Practical work and the development of practical skills and the assessment of them is essential and must be an integral part of all biology taught in schools and colleges. Practical work should be understood as an integral part of answering the big question 'How do we study the biological world?' and learners should have the opportunity to encounter a range of practical skills appropriate to their stage of education.

At present, we are developing our recommendations for how the content of the biology curriculum should be assessed. However, we recommend that any programme of **assessment** should include all three dimensions outlined in this curriculum framework: Biology as a science, Core concepts of biology and Biology in the world.