

## BIOLOGY

### **Composite: Biology B1- Key concepts in Biology**

Year 10

Why do we deliver this?

We teach this topic to help students **belong** in science by building a shared scientific language and understanding of what living things are and how scientists work. It secures foundational knowledge that enables all students to **achieve**, particularly through clear models, repetition and practical experiences that support SEND and disadvantaged learners. By developing confidence with core ideas early, students are able to **thrive** as curious, resilient learners who see biology as something they can succeed in.

### **Composite: Biology B2- Cells and control**

Year 10

Why do we deliver this?

This topic is taught so students can understand themselves and other living organisms, strengthening a sense of **belonging** through relevance to the human body and health. Carefully sequenced content, visual models and structured practical work enable all students to **achieve**, especially those who benefit from concrete examples and scaffolded learning. Understanding how the body maintains balance supports students to **thrive** by promoting health awareness and independence.

### **Composite: Biology B3 - Genetics**

Year 10

Why do we deliver this?

We teach genetics to help students **belong** by understanding inheritance, variation and diversity, reinforcing respect for difference and identity. Clear explanations, low-stakes practice and ethical discussions support students to **achieve**, particularly those who may find abstract concepts challenging. This knowledge enables students to **thrive** by making informed decisions about health, family and future scientific learning.

### **Composite: Biology B4 - Natural selection and genetic modification**

Year 10

Why do we deliver this?

This topic helps students **belong** by understanding how life on Earth has developed and how humans interact with the natural world. Structured debates, real-world examples and careful language choices ensure all students can **achieve**, including vulnerable learners who benefit from guided discussion and clear moral frameworks. Exploring evolution and biotechnology helps students **thrive** as thoughtful, responsible citizens.

**Composite: Biology B5 - Health & disease**

Year 10

Why do we deliver this?

We teach this topic to support **belonging** through a strong focus on personal and community health. Accessible case studies and clear cause-and-effect reasoning allow all students to **achieve**, particularly SEND and PP learners who benefit from relevance and repetition. This knowledge empowers students to **thrive** by making informed lifestyle choices and understanding healthcare in society.

**Composite: Biology B6 - Plant biology**

Year 11

Why do we deliver this?

This topic develops **belonging** by connecting students to the natural environment and food systems that affect everyone. Practical investigations and visual learning strategies help students **achieve**, especially those who benefit from hands-on and outdoor learning. Understanding plant biology enables students to **thrive** by appreciating sustainability and the science behind global challenges.

**Composite: Biology B7 - Animal control & coordination**

Year 11

Why do we deliver this?

We teach this topic to help students **belong** by understanding how their bodies respond to internal and external changes. Carefully sequenced content, visual models and relatable examples support all students to **achieve**, particularly those who benefit from concrete, real-life contexts. By developing awareness of balance, regulation and health, students are supported to **thrive** as independent learners who can make informed choices about wellbeing.

**Composite: Biology B8 - Heart & respiration**

Year 11

Why do we deliver this?

This topic is taught so students **belong** through understanding how essential substances move within living organisms. Diagrams, practical investigations and structured explanations enable all students to **achieve**, especially SEND and disadvantaged learners who benefit from visual support and repetition. Understanding transport systems helps students **thrive** by linking biology to health, fitness and environmental sustainability.

**Composite: Biology B9 - Ecosystems**

Year 10

Why do we deliver this?

We teach this topic to foster **belonging** by helping students see their role within interconnected ecosystems. Real-world examples and clear cause-and-effect relationships support students to **achieve**, particularly those who need accessible entry points into complex systems. This knowledge enables students to **thrive** as environmentally responsible citizens who understand sustainability and global challenges.