SCIENCE
CURRICULUM AIMS

Everything we do in Science will help shape a positive future for life beyond school.

During their time at Cottingham High School, Science learners will become:

- **Resilient Learners**
- **Scientific Investigators**
- **Knowledge Applicators**
- **Skill Rich Scientists**
- **Critical Evaluators**
- **Scientifically Curious People**

Believe **Shaping positive futures in the development of personal characteristics**	**Resilient Learners** Learners can tackle unknown and unseen challenges that present themselves throughout the duration of their studies and beyond. Staff facilitate this within learners by scaffolding tasks to ensure learners can confidently tackle the complex scientific knowledge within and through slowly removing these scaffolds, learners' self-belief and resilience is fostered. **Scientific Investigators** We develop inquisitive learners who are curious about their place in the world. These learners develop into competent scientific enquirers who can ask questions about ideas and data. Learners are encouraged to work scientifically by planning and carrying out a range of practical and experimental tasks using a variety of different apparatus then drawing relevant conclusions based upon the data obtained.
Achieve **Shaping positive futures by helping our pupils to achieve**	**Knowledge Applicators** Our learners master the 'big ideas' delivered through the science curriculum, by being able to manipulate and apply their knowledge of key concepts to unfamiliar scenarios. The three strands of science (biology, chemistry and physics) are studied through Year 7 – 11, with key 'golden threads' such as energy, particles and cells intertwined through the programme of study. Knowledge and understanding are reviewed regularly, routinely and summatively to identify gaps so appropriate intervention can take place. **Skill Rich Scientists** Learners gain a wide breadth of understanding of **transferrable skills** that can be applied cross-curricular and into everyday life - from application of **maths skills** to **scientific literacy**. These allow them to develop as an individual, **work cooperatively and independently, communicate effectively** within different scenarios, and **critically analyse** information. They become effective scientific communicators and develop the ability to decode unfamiliar scientific vocabulary**.** Through effectively applying

	knowledge using the skills they develop; learners can achieve the qualifications needed to reach their next steps in life.
Succeed **Shaping positive futures so that pupils can contribute to wider society and life beyond school**	**Critical Evaluators** During their time at Cottingham, learners develop the skills needed to make **educated, informed lifestyle choices** to see the relevance, employability, and cultural importance of science, particularly in Hull and the East Riding. They obtain the skills necessary to evaluate the evidence in articles in the media to formulate their own conclusions, particularly with the rise in modern trends and disinformation on social media. **Scientifically Curious People** Through fostering a love of science, learners become curious to find the "why" in different aspects of their life. It allows them to recognise and understand the science where you least expect it, in all workplace environments – from hairdressing to personal training. It also can inspire learners to succeed in a scientific career, especially considering the Humber region as a hotbed of potential opportunities.

Through a love of SCIENCE, our learners gain the skills, knowledge and curiosity to battle the challenges of today and solve the problems of tomorrow.