



## Science Curriculum statement

### What is our vision for Science at North Star 180?

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### Intent

At North Star 180, we envision a science curriculum that nurtures a sense of curiosity in our students towards themselves, their environment, and the realm of scientific inquiry. Our goal is to equip them with a robust scientific knowledge that will serve as a foundation for their journey into secondary school and beyond.

We aim for our students to:

- **Develop:** Curiosity, critical thinking skills, and a passion for exploration.
- **Answer:** Questions through scientific inquiry and investigation.
- **Understand:** Fundamental scientific concepts and their real-world applications.
- **Acquire a range of:** Skills and knowledge that enable them to engage with scientific ideas and concepts effectively.
- **Participate in discussion:** Explore the Social, Moral, and Cultural implications of scientific advancements and how they impact everyday life.
- **Be prepared to progress into:** Advanced study of science, including the pursuit of GCSE qualifications in secondary school.

**Implementation:** To achieve our vision, we have devised a comprehensive plan:

- We follow the White Rose Science curriculum, which emphasizes depth, progression, problem-solving, and the integration of scientific inquiry into lessons.
- Regular whole-school events, such as Girls in STEM, Science Day, Wildlife and Environment Days, and outdoor science learning, provide opportunities for hands-on exploration and skill development.
- We adopt a cross-curricular approach, integrating science into other subjects such as:

- **Circle Time:** Engaging discussions about scientific concepts, encouraging students to share their observations and questions about the natural world.
- **Fine Motor Skills Activities:** Incorporating scientific activities that involve fine motor skills, such as conducting experiments that require precise manipulation of tools or materials.
- **PSHE (Personal, Social, Health, and Economic Education) Lessons:** Integrating science topics related to health, nutrition, and well-being into PSHE lessons, promoting an understanding of the scientific principles underlying personal and social choices.

**Impact:** We anticipate several positive outcomes resulting from our science curriculum:

- **Assessment:** Formative and summative assessments are used to track progress, identify misconceptions, and address gaps in learning promptly.
- **Application of Knowledge:** Students will apply scientific knowledge to real-life contexts, fostering everyday applications of science.
- **Closing the Gap:** Our curriculum aims to narrow the gap to age-related expectations, particularly for students who have had limited exposure to science prior to joining NorthStar 180.
- **Retention and Recall:** Students will retain and recall information from previous learning, reinforcing their understanding through questioning and reflection.
- **Language Proficiency:** Students will articulate their understanding of scientific concepts using appropriate terminology, integrating scientific language into their everyday vocabulary.
- **Future Pursuits:** We aim to inspire students to pursue further qualifications in science during their secondary school education.