

## Science at Sheringham High School

Mrs Sarah Hookway

Head of Science

### Introducing the Science Team

Head of Science:

Mrs Hookway

Head of Biology:

Miss Lucas

Head of Chemistry: Mrs Waldron

**Science Teachers:** 

Mrs Turner

Mr Wilkerson

Mr Evans

Miss Cane

Mrs Pelayo

Science Technicians: Mrs Sharp Miss Tipper

#### **Science at Sheringham High School**

The school's motto is 'Success for All' and we strive to ensure all of our students succeed in Science. We aim to provide and engaging and challenging curriculum for all students.

Enthusiasm and enjoyment are key to the achieving in Science. We aim to inspire students to become scientifically literate so they can decode the world around them and to consider STEM careers through the use of both practical and theory work.



### **Changes in Science**

The current specification for Science at GCSE was updated in 2016.

The way students were graded also changed from  $A^* - G$  to 9 - 1 when this specification was first introduced.

Levels were also removed at KS3 and replaced with 'Progress Bands' to match the GCSE grades to support a five year programme of study through High School.

A-level grades remain  $A^* - E$ .



#### What will my child be learning? Why?

Term	Year 7 topics	Year 8 topics
Autumn 1		
Autumn 2		
Spring 1		
Spring 2		
Summer 1		
Summer 2		

- To ensure interleaving and repetition of knowledge and skills.
- To support long-term retention of knowledge.

- Organised so ideas develop across the year within subjects as well as over the years, starting with foundation ideas.
- Organised for suitability of learning and time of year, e.g. it would be difficult to completed field work in Ecology in the winter!
- Similar topics in the same term each year so gaps between learning are equally spaced out making learning easier and not disadvantaging any particular subject.

### The Journey to GCSE

#### In Year 10, we begin the GCSE programme of study. There are two routes:



AQA Combined Science Trilogy: All students study the content of this course, leading to two GCSE grades in Science.



AQA Biology, Chemistry and Physics (Triple Science): Students may choose to do this as one of their options. They achieve three GCSE grades, one in each subject. These courses prepare students better for A-level study, but they are still able to progress with Combined Science, too.

### **Beyond GCSE**

#### We currently offer four post-16 courses in Science:



#### **Science Classes**

Students are organised into 5 groups.

They are initially set based on their KS2 results, matching their Maths sets.

All classes study the same topics, but the teaching and resources are tailored to their ability.

A formal assessment will take place each half term and we will use these results to refine setting throughout the year and at the end of each year.

# SCIENCE is a part of EVERYONE'S everyday life.

Bill Nve

### **Science Lessons and Resources**

#### A typical Science lesson:



Teacher explanation Supported work Independent work Practical work Demonstrations

Plenary: Assessing if you have understood today's learning

Resources to support your child's learning:

<u>Kerboodle</u> – an online platform with access to textbooks and tasks to practice what you have learnt in school. Your teacher will provide you with a login to this and will set homework to complete on this platform.

<u>Core Questions</u> – these form the basis of our retrieval practice and will feature in assessments. You can support your child by quizzing them on these questions. It doesn't have to be onerous – 10 minutes per week is enough.

### **Expectations in lessons**

#### <u>Exercise books:</u>

These will mostly remain at school, although your teacher may allow you to take it home to complete homework or revision.

Every lesson should have an underlined date and title.

We expect students to show pride in their work and their books should reflect this.

#### **Practical work**

- Risk assessments are carried out for practical work.
- Although we wouldn't use anything particularly hazardous in KS3, it is important that <u>all</u> students follow the lab safety rules that they are currently being introduced to.
- Although practical work takes place regularly, it will not be every single lesson. Even so, it is important students follow basic lab safety of never eating or drinking in the Science laboratories.
- When practical work does take place, students are expected to carefully follow instructions for the safety of themselves and others.

## **Extra Curricular Opportunities**

At present, we offer the following throughout the school:



- <u>STEM Robotics Club</u> This is a competitive club where Lego robots are designed and battled against each other. Winning teams in Norfolk get a fully funded trip to Estonia.
- Youth STEMM Award Run by Mrs Hookway. This is open to Year 9 upwards where students complete activities to achieve a nationally recognised certificate and medal.
- <u>GCSE Science Live! Trip</u> Run by Mrs Hookway. Open to Year 10 only, students attend a day of lectures by prominent scientists.
- <u>SMSC Days</u> the Science department runs activities for different year groups. These differ from year to year, but this year we will be offering a trip to Banham Zoo for Year 7 in the summer term.

#### **Contact details**

 If you have any issues or problems you would like to discuss regarding your child in Science, please contact us.

• You can either phone the school or you can email.

It is our aim that every student enjoys their Science lessons.

If pupils remember knowledge taught, they are more likely to feel confident in the subject, feel more comfortable in tests and take their learning further.