

**SUBJECT:** KS3 Science

**YEAR:** 8

**HEAD OF DEPARTMENT:** Dr H Craig

**GROUPING POLICY:** Students are taught in ability groups, set jointly with the Maths Department

**COURSE CONTENT for YEAR 8 SCIENCE:**

**What will my child learn?**

In Key Stage 3 students follow an ‘in-house’ scheme of work built around the AQA ‘big ideas’ Key Stage 3 curriculum:

<http://www.aqa.org.uk/subjects/science/ks3/ks3-science-syllabus>

This breaks the curriculum down into 10 ‘big ideas’, each of which is subdivided into four small topics lasting 3-6 lessons. Students will study the majority of the topics in Years 7 and 8. In Year 9 they will tackle a small number of the most difficult topics before beginning their GCSE course in Term 4.

In Year 8 the Key Stage 3 topics studied are:

| Term | Big Idea       | Topics                                |
|------|----------------|---------------------------------------|
| 1    | Waves          | Light                                 |
|      | Earth          | Universe                              |
|      | Genes          | Evolution                             |
| 2    | Forces         | Gravity                               |
|      | Reactions      | Acids and Alkalis                     |
|      | Organisms      | Breathing                             |
| 3    | Electromagnets | Magnets and Electromagnets            |
|      | Genes          | Human Reproduction                    |
| 4    | Energy         | Energy Transfer and Work Done         |
|      | Earth          | Climate                               |
|      | Genes          | Inheritance                           |
| 5    | Energy         | Heating and Cooling                   |
|      | Waves          | Wave Effect and Wave Properties       |
| 6    | Reactions      | Chemical Energy and Types of Reaction |
|      | Organisms      | Digestion                             |

In addition to the taught content, students will also be given the opportunity to develop their scientific investigation skills such as method writing, table drawing and graph construction, which will prepare them for GCSE Science in Years 10 and 11.

**What will homework look like?**

Your child will be set homework weekly. This may consist of a project or research task, learning key words or spellings, questions to practise the material covered in class or revision for a test.

**What enrichment opportunities are available?**

There will be enrichment opportunities during the year, e.g. activities during National Science Week.

### ASSESSMENT

#### How will my child's work be assessed?

In line with school policy, students will receive detailed feedback on their work twice per term. One piece of feedback per term will be formative and focus on skills development, and the second piece will be a summative test on the content taught that term. In term 1, the test will be replaced by a 'transition test' so that we can establish a baseline for students' performance, and in term 6 the termly test will be replaced by an end of year exam, for which students will be required larger amounts of content. All of the assessed pieces of work and feedback are stored in folders kept in school.

In addition, students will receive regular feedback from self-marking, peer assessment, verbal feedback and automated online assessment.

All assessment data will be used along with behaviour and attitude to learning profiles to determine an appropriate set for Year 9.

### ADDITIONAL INFORMATION

#### How can I support my child in this subject?

- Be positive about learning Science when speaking to your child, whatever your personal experience of Science was.
- Discuss what your child is learning in Science with them; get them to explain everyday phenomena to you. Draw their attention to and discuss scientific advances that are reported in the news.
- Your child should receive homework weekly – please insist that this is completed to a good standard. If you are able to, help your child to complete their homework. If they get stuck, encourage them to contact their teacher, who will be happy to help.
- Look through your child's Science book with them. Ask them to show you work that they are proud of.
- Encourage and help them to learn key words and facts.
- Encourage them to access the resources available to them on the school website.

#### How can I support my child with exams?

The Department publishes revision lists for all tests, which will be given to students via Show My Homework and also available via the school website. Encourage your child to look through these lists carefully. The list includes key words and facts which will be tested in a 'recall' section of their test. Help them to make revision cards containing these words and facts, and then go through the cards with them and test them on what they have learnt. The later sections of each test will require students to apply their knowledge; at this point, get them to look in their book at the kinds of problems and questions they have been doing in class and, if possible, to have another go at them.