# Supporting your child through KS3 Science

Miss R Offer
Team Leader of Key Stage 3 Science

Rebecca.offer@theregisschool.co.uk



#### The Curriculum





#### **Year 7- Passport to Science**

A successful programme which will give your child the skills and confidence to work safely in a Science lab!

- Lab safety
- Lab procedures
- Scientific equipment
- Using equipment

#### Year 7



Each term at The Regis School will consist of a varied diet of double topics from Biology, Chemistry and Physics. This will be supplemented with practical work and demonstrations (How Science Works-HSW).

- ☐ Cells, tissues and organs
- ☐ Reproduction and variation
- □Chemical reactions
- **□** Particles
- Forces and motion
- **□**Energy

#### Year 8



Each term at The Regis School will consist of a varied diet of double topics from Biology, Chemistry and Physics. This will be supplemented with practical work and demonstrations (How Science Works-HSW).

- ☐ Ecological Relationships and Classification
- □ Digestion and Nutrition
- Materials and the Earth
- ☐ Periodic Table
- ☐ Light and Space
- ☐ Electricity and Magnetism

#### Year 9



Each term at The Regis School will consist of a varied diet of double topics from Biology, Chemistry and Physics. This will be supplemented with practical work and demonstrations (How Science Works-HSW).
☐Biological Systems and Processes
□Plants and Photosynthesis
Reactivity
☐ Energetics and Rates
□Sound Waves
□ Forces in Action
□ Matter



#### **Assessment-KPIs**

KPIs (Key Performance Indicators) are a summary of what a student should be able to do by the end of a topic, having been taught the curriculum content. They are laid out in the following way:

Curriculum (What needs to be taught)



KPIs (What needs to be assessed)

#### National Curriculum Content and KPIs

In terms of science <u>content</u>, the KPIs are explicitly linked to each of the science topics.

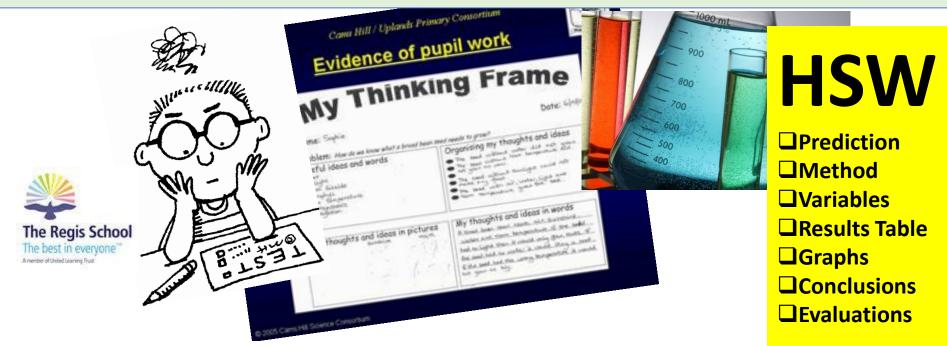
There are a large number of NC statements in KS3 science and for each topic there are a number of KPIs, but there is not a KPI for each NC statement.

## Biology, Chemistry and Physics and Working Scientifically KPIs

- Biology, Chemistry and Physics are equally weighted in the curriculum, and while there is not the same number of KPIs across the three sciences, this does not distort the balance across the curriculum.
- The KPIs for Biology, Chemistry and Physics <u>content</u> are to be achieved by the end of year 7, 8 and 9 respectively.
- The KPIs for <u>WS skills</u> have been written with the end of year 9 in mind i.e. they should be developed throughout year 7, 8 and 9, and be achieved by the end of year 9. WS skills are be embedded throughout KS3, wherever they are deemed appropriate, so that students have multiple opportunities to develop them.

#### The Regis School Science Assessments

- Throughout the topic- summative and formative comments are given and fed back to students suggesting how to improve their work.
  - KPIs are assessed as to whether students have mastered them or are still developing mastery.
    - Homework- marked and goals set on how to improve
    - At the end of each topic- formal test to assess learning
      - 2x year synoptic assessments (January and June)





### Homework



An essential part of the Science curriculum

- Set once per week- check the Class Charts website to view homework's being set.
- 1 homework a fortnight will be knowledge organiser based
- The other homework a fortnight will be another task such as completing questions from the topic booklet

#### **Useful websites**

http://www.bbc.co.uk/bitesize/ks3/science/









- Pupils will learn the definitions and spellings of Science keywords. They will become confident using these to describe and explain science.
- Literacy will be frequently checked through the use of knowledge organisers in lesson and at home.







In the Spring term, all students in KS3 will take part in an independent Scientific research project. Support will be given in class and through ClassCharts. The fair runs as a 6 week independent homework research project.

Article 29: Developing students personalities, abilities and potential to the MAX!



Article 31: Take part in a wide range of activities.

#### How can you support your child with science?

- Promote science as one of the core subjects and its relevance in many careers and jobs-Most employers look for a C or better in English, Maths and Science
- Use KS3 BBC Bite size science to recap or read ahead on each topic
- Buy a revision guide from WHSmith or online
- Encourage them to view science in the media
- Make sure they know how to write up a practical correctly
- Support them with homework
- Ask them about everyday events and how science links in

