



# St Benedict's Catholic School

*The Catholic Secondary School for West Suffolk*

## Chemistry Separate Science Curriculum Guide

### Year 10

#### Exam Board: J248 OCR Gateway A (9-1) Chemistry

To find out more about this particular course, please follow the link below.

<https://www.ocr.org.uk/qualifications/gcse/gateway-science-suite-chemistry-a-j248-from-2016/>

#### Autumn Taught Content

Unit C4:

- Group 1, 7 & 0 elements
- Transition Metals
- Detecting gases
- Detecting anions and cations
- Instrumental analysis

Unit C3

- Chemical formulae
- Chemical formulae
- Ionic and half equations
- The mole

#### Spring Taught Content

Unit C3 cont'd:

- Exothermic and endothermic reactions
- Energy changes
- Redox reactions
- pH scale
- Acids
- Electrolysis
- Electroplating

#### Summer Taught Content

Unit C5:

- Rate of Reaction
- Equilibria

- Theoretical & Percentage Yield
- Titrations

### **Assessment**

Students will be tested formally throughout the year. This will be once per term, in the weeks either side of the half term breaks. Students will sit papers at either Higher or Foundation tier based on previous assessment. There will also be less formal assessments at other points during the year. Students will also be regularly tested on previous material from the GCSE course through low stakes quizzes.

### **Homework Expectations**

Students should be set homework once every fortnight. This may include completing questions, research tasks or revision.

### **Reading List**

The Elements: A Visual Exploration of Every Known Atom in the Universe - Theodore Gray.

The Big Bang – A history of Explosives. – G.I. Brown

Chemistry: A Very Short Introduction. – Peter Atkins

The Atom: The building block of Everything. Jack Challoner.

Strange Chemistry: The Stories Your Chemistry Teacher Wouldn't Tell You. – Steven Farmer.

Stuff matters: the strange stories of the marvellous materials that shape our man-made world. Mark Miodownik.

### **Extra and Super Curricular Opportunities**

Currently none available in Year 10.