

Curriculum catch up statements for upper school Science

Year 9

Year 9 will have completed the following topics remotely in year 8:

8K – energy transfer

8D – unicellular organisms

9A – genetics and evolution

9E – making materials

9I – Forces and motion

9B – Plant growth

9F – Reactivity

9J – Force fields and electromagnets

From these topics a list of key concepts requiring extra attention are as follows:

Biology

- The carbon cycle → when teaching CB9/SC9
- Variation → when teaching CB3
- Natural selection and evolution → when teaching CB4
- Respiration → when teaching CB8
- Photosynthesis and plant adaptations → when teaching CB9

Chemistry

- Polymers → 9X1 and 9Y1 to cover (potential triple scientists)
- Recycling → when teaching CC10-12
- Particle theory and reaction rates → when teaching CC13-15
- Reactivity series and rusting → when teaching CC10-12
- Exothermic and endothermic reactions → when teaching CC13-15
- Displacement → when teaching CC10-12 and CC13-15
- Extracting metals → when teaching CC10-12

Physics

- Electricity and resistance → when teaching CP9
- Efficiency → When teaching CP3
- Forces → when teaching CP2
- Speed calculations → when teaching CP1

Science staff will teach these concepts in a spiral fashion starting at lower school level and ensuring students have the necessary prior knowledge before moving onto GCSE level.

Year 10

Year 10 will have started the GCSE Science course material in year 9, with 2020 being the first year that this happened. In order to ensure that students catch up on missed work they will begin the course in year 10 with CB4, CC5-7 and CP3 which means that they will cover the topics they missed/completed remotely.

Year 11

- Strategic revision HW will be set based on previous topics from year 10 in order to prepare students for mock exams and to go over topics covered remotely. This will be from the 21/9/2020. Students will then complete assessments for these topics in lesson time and remedial teaching/feedback will take place.
- Lesson time that would have been spent completing practical work will be used to ensure students complete the course.
- CORE practicals to be completed by using videos and lab books – possibly in ‘focus day’ style sessions and exam style questions to be set as homework from Autumn 2.
- Revision sessions will begin as soon as possible (to be reviewed after half term).
- Strategic HW will be set based on topics that are more ‘content based’ going forward to save time (from Autumn 2 onwards in combination with core practical HW).