

Long Term Plan: Y8 Science

| Date           | w.c<br>04.09.23                                                             | w.c<br>11.09.23                                                          | w.c<br>18.09.23                                                                         | w.c<br>25.09.23                                                                        | w.c<br>02.10.23                                                              | w.c<br>09.10.23                                                               | w.c<br>30.10.23                                                                                 | w.c<br>06.11.23                                                           | w.c<br>13.11.23                                                                        | w.c<br>20.11.23                                                                                 | w.c<br>27.11.23                                                                                  | w.c<br>04.12.23                                                        | w.c<br>11.12.23                                                                          | w.c<br>18.12.23                                                         |
|----------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Topic          | Introduction                                                                | B4 organisms                                                             | B4 organisms                                                                            | B4 organisms                                                                           | B4 organisms                                                                 | B4/C4                                                                         | C4 Atoms                                                                                        | C4 Atoms                                                                  | C4 Atoms                                                                               | C4/ P4                                                                                          | P4 Electromagnets                                                                                | DCP 1                                                                  | P4 Electromagnets                                                                        | P4 Electromagnets                                                       |
| Bespoke Recall | variables                                                                   | reproductive organs including umbilical cord                             | risk assessments                                                                        | renewable and non-renewable energy                                                     | specialised cells linking to plants                                          | means (discounting anomaly)                                                   | force diagrams                                                                                  | pH scales                                                                 | plotting points on graph                                                               | describing a trend from a graph                                                                 | describing patterns                                                                              | acids and alkalis                                                      | Drawing conclusions from data                                                            | variables from hypothesis                                               |
| Lessons        | Introduction lesson                                                         | Respiratory system, breathing, exercise<br><i>Skills: H, G, E and EX</i> | drugs, asthma and smoking, academic text, gas exchange<br><i>Skills: H, G, E and EX</i> | lung disease, balanced diets, food tests<br><i>Skills: H, G, E and EX</i>              | unbalanced diets, digestive system, enzymes<br><i>Skills: H, G, E and EX</i> | End of unit, WCF, Periodic table and history<br><i>Skills: H, G, E and EX</i> | metals and non-metals, Atoms, Atomic structure group 1 metals,<br><i>Skills: H, G, E and EX</i> | Group 7, group 0, exploring patterns<br><i>Skills: H, G, E and EX</i>     | Combining elements, comparing elements, Academic text<br><i>Skills: H, G, E and EX</i> | End of unit and WCF, describing current, investigating current<br><i>Skills: H, G, E and EX</i> | voltage, investigating voltage, resistance, series and parallel<br><i>Skills: H, G, E and EX</i> | DCP1 and WCF, Academic text<br><i>Skills: H, G, E and EX</i>           | comparing S+P, static, electric fields, magnetic fields<br><i>Skills: H, G, E and EX</i> | Magnets investigation, end of unit WCF<br><i>Skills: H, G, E and EX</i> |
| FB             | Specialised cells                                                           | Graphs                                                                   | Waves                                                                                   | Forces                                                                                 | Evaluate Qs                                                                  | Variables                                                                     | averages and data                                                                               | pH scale                                                                  | Justifying opinions                                                                    | displacement reactions                                                                          | Risk assessments                                                                                 | Renewable vs non-renewable                                             | Energy stores                                                                            | risk assessment                                                         |
| HW             |                                                                             | P2                                                                       | P2                                                                                      | P2                                                                                     | P2                                                                           | P2                                                                            | B3                                                                                              | B3                                                                        | B3                                                                                     | B3                                                                                              | B3                                                                                               | B3                                                                     | B3                                                                                       | B3                                                                      |
| Date           | w.c<br>01.01.24                                                             | w.c<br>08.01.24                                                          | w.c<br>15.01.24                                                                         | w.c<br>23.01.24                                                                        | w.c<br>29.01.24                                                              | w.c<br>05.02.24                                                               | w.c<br>19.02.24                                                                                 | w.c<br>26.02.24                                                           | w.c<br>04.03.24                                                                        | w.c<br>11.03.24                                                                                 | w.c<br>18.03.24                                                                                  | w.c<br>25.03.24                                                        |                                                                                          |                                                                         |
| Topic          | B5 Bioenergetics                                                            | B5 Bioenergetics                                                         | B5 Bioenergetics                                                                        | B5/C5                                                                                  | C5 Reactions                                                                 | C5 Reactions                                                                  | C5 Reactions                                                                                    | P5 Waves                                                                  | DCP2                                                                                   | Science week                                                                                    | P5 Waves                                                                                         | P5 Waves                                                               |                                                                                          |                                                                         |
| Bespoke Recall |                                                                             |                                                                          |                                                                                         |                                                                                        |                                                                              |                                                                               |                                                                                                 |                                                                           |                                                                                        |                                                                                                 |                                                                                                  |                                                                        |                                                                                          |                                                                         |
| Lessons        | bank hol, photosynthesis, testing for starch<br><i>Skills: V, L, EC, AH</i> | Leaf adaptation, movement of water, investigating photosynthesis         | academic text, aerobic respiration, anaerobic respiration and fermentation,             | end of unit, WCF, Conservation of mass, word equations,<br><i>Skills: V, L, EC, AH</i> | endo and exo, endo, exo practical, combustion, incomplete combustion         | Comparing fuels practical, thermal decomp, balancing equations,               | academic text<br>End of unit and WCF<br><i>Skills: V, L, EC, AH</i>                             | Waves, EM spectrum, dangers of EM spectrum<br><i>Skills: V, L, EC, AH</i> | DCP2 and WCF<br><i>Skills: V, L, EC, AH</i>                                            | Science week: theme time<br><i>Skills: V, L, EC, AH</i>                                         | Properties of light, reflection and practical<br><i>Skills: V, L, EC, AH</i>                     | refraction and practical, sound systems (microphones and loudspeakers) |                                                                                          |                                                                         |

|                |                                                                         |                                                            |                                                               |                                                                  |                                                                          |                                                                                   |                                                                  |                                                       |                 |                 |                                                                                     |                                                                      |                                                      |                                                       |    |    |
|----------------|-------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------|-----------------|-----------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------|----|----|
|                |                                                                         | Skills: V, L, EC, AH                                       | respiration in plants<br>Skills: V, L, EC, AH                 |                                                                  | Skills: V, L, EC, AH                                                     | Skills: V, L, EC, AH                                                              |                                                                  |                                                       |                 |                 |                                                                                     | Skills: V, L, EC, AH                                                 |                                                      |                                                       |    |    |
| FB             | Diffusion and cells                                                     |                                                            |                                                               | forces                                                           |                                                                          |                                                                                   | Method writing                                                   |                                                       |                 |                 |                                                                                     | Elements etc                                                         |                                                      |                                                       |    |    |
| HW             | C3                                                                      | C3                                                         | C3                                                            | C3                                                               | C3                                                                       | C3                                                                                | P3                                                               | P3                                                    | P3              | P3              | P3                                                                                  | P3                                                                   |                                                      |                                                       | P3 | P3 |
| Date           | w.c<br>15.04.24                                                         | w.c<br>22.04.24                                            | w.c<br>29.04.24                                               | w.c<br>06.05.24                                                  | w.c<br>13.05.24                                                          | w.c<br>20.05.24                                                                   | w.c<br>03.06.24                                                  | w.c<br>10.06.24                                       | w.c<br>17.06.24 | w.c<br>24.06.24 | w.c.<br>01.07.24                                                                    | w.c<br>08.07.24                                                      | w.c<br>15.07.24                                      | w.c<br>22.07.24                                       |    |    |
| Topic          | B6 Genes                                                                | B6 Genes                                                   | B6 Genes                                                      | B6 Genes                                                         | C6 Resources                                                             | C6 Resources                                                                      | C6 Resources                                                     | C6 Resources                                          | Revision        | DCP3            | P6 Energy                                                                           | P6 Energy                                                            | P6 Energy                                            | P6 Energy                                             |    |    |
| Bespoke Recall |                                                                         |                                                            |                                                               |                                                                  |                                                                          |                                                                                   |                                                                  |                                                       |                 |                 |                                                                                     |                                                                      |                                                      |                                                       |    |    |
| Lessons        | Biodiversity, competition, natural selection, DNA<br>Skills: C, O, F, S | Extinction, variation, fertilisation<br>Skills: C, O, F, S | cell division, genetic crosses, cloning<br>Skills: C, O, F, S | academic text, end of unit assessment, WCF<br>Skills: C, O, F, S | Earth's resources, extracting resources, recycling<br>Skills: C, O, F, S | Water waste, water cycle, ceramic, polymers and composites,<br>Skills: C, O, F, S | human impact, climate change, carbon cycle<br>Skills: C, O, F, S | Academic text, end of unit, WCF<br>Skills: C, O, F, S | Revision week   | DCP3 and WCF    | energy transfers, work done, deformation Atmospheric pressure<br>Skills: C, O, F, S | pulleys and levers, thermal energy. conduction<br>Skills: C, O, F, S | convection, radiation, summary<br>Skills: C, O, F, S | Academic text, end of unit, WCF<br>Skills: C, O, F, S |    |    |
| FB             | Energy resources                                                        |                                                            | Digestive system                                              |                                                                  | periodic table                                                           |                                                                                   | Electricity                                                      |                                                       | Photosynthesis  |                 | Conservation of mass                                                                |                                                                      | Graphs                                               |                                                       |    |    |
| HW             | B4                                                                      | B4                                                         | B4                                                            | B4                                                               | B4                                                                       | B4                                                                                | C4                                                               | C4                                                    | C4              | C4              | C4                                                                                  | C4                                                                   | C4                                                   | C4                                                    |    |    |

See assessment Calendar for details of Formative and Summative DCP Assessments

Details of the academic texts can be found in the centralised planning.

FB is our Flashback lessons. These form part (or all) of the last lesson of the week.

Bespoke Flashback and bespoke recalls are decided from formative assessments and DCP data. Other recall topics are built into lessons on the centralised planning.

See Skills code sheet to understand the skill letters.

SMSC/personal development opportunities see medium plan for more details

See documents on science week