

| Subject                                                                                                                                                                                                                                                                 | Year                                                                                                                                                                                                                    | Term                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Science                                                                                                                                                                                                                                                                 | 9                                                                                                                                                                                                                       | 1                                                                                         |
| Topic                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                         |                                                                                           |
| C8 Chemical Analysis                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                         |                                                                                           |
| Content (Intent)                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                         |                                                                                           |
| <b>Prior Learning (Topic)</b> KS2 national curriculum <b>Y5</b> properties and changes of materials, KS3 <b>Y7</b> 7C1 Separating mixtures, <b>Y8</b> 8C2 gas tests                                                                                                     |                                                                                                                                                                                                                         |                                                                                           |
| <ul style="list-style-type: none"><li>Mixtures and formulations</li><li>Pure substances</li><li>Chromatography</li><li>Identification of common gases</li></ul>                                                                                                         |                                                                                                                                                                                                                         |                                                                                           |
| <b>Future Learning (Topic)</b> , <b>Y10</b> Bonding, structure and properties of matter, <b>Y11</b> C4 Chemical changes, <b>Y13</b> 6.3.1 Chromatography and chemical analysis                                                                                          |                                                                                                                                                                                                                         |                                                                                           |
| How will knowledge and skills be taught? (Implementation)                                                                                                                                                                                                               | How will your understanding be assessed & recorded (Impact)                                                                                                                                                             |                                                                                           |
| Practical work: <ul style="list-style-type: none"><li>Measuring the melting point of two unknown solids.</li><li>Chromatography practical (with pen ink)</li><li>REQUIRED PRAC 12. Separating pigment in chlorophyll</li><li>Gas tests</li></ul> Written Notes in book. | <ul style="list-style-type: none"><li>- 1 x standard homework (Written feedback. Response expected.)</li><li>-1 x combined end of topic test with C7 (Level given. Verbal feedback to class and individuals.)</li></ul> |                                                                                           |
| How can parents help at home?                                                                                                                                                                                                                                           |                                                                                                                                                                                                                         |                                                                                           |
| Look at the topic specific resources on the VLE<br>Use appropriate youtube channels: cognito, primrosekitten, khan academy, freesciencelessons.<br>Take an interest! Ask your children what they have learnt and be curious about their learning.                       |                                                                                                                                                                                                                         |                                                                                           |
| Helpful further reading/discussion                                                                                                                                                                                                                                      |                                                                                                                                                                                                                         |                                                                                           |
| <b>Reading</b>                                                                                                                                                                                                                                                          | <b>Vocabulary Lists</b><br>Formulation<br>Mixture<br>Stationary/mobile phase<br>Chromatography<br>solvent                                                                                                               | <b>Careers Links</b><br>Environmental scientist<br>Medical testing<br>Forensic scientist. |