## High Tunstall College of Science Curriculum Intent

## Subject: Separate Chemistry Year: 11

## Thread 1—Atomic Structure and the Periodic table



|   | Chemistry Thread 1   |   | Progress |   |  |
|---|--|---|----------|---|--|
| Торіс   | Key ideas  | R | Α        | G |  |
| Atomic Struc-<br>ture and the<br>Periodic Table | I can describe the structure of the atom, and explain how this has developed over time |   |          |   |  |
|   | I can describe and explain properties of group 0 elements                              |   |          |   |  |
|   | I can describe and explain properties of group 1 elements                              |   |          |   |  |
|   | I can describe and explain properties of group 7 elements                              |   |          |   |  |
|   | I can explain trends in reactivity in different groups of the periodic table           |   |          |   |  |
|   | I can compare and contrast alkali metals and transition metals                         |   |          |   |  |

| Lesson | Learning Focus                                     | Assessment   | Key Words  |  |
|--------|--|--|--|--|
| 1      | What are atoms like?                               | SOLO taxonomy tasks  | Atom, element, com-<br>pound, nucleus, proton,<br>neutron, electron, gold foil<br>experiment |  |
| 2      | What are the noble gases?                          | Completion of variety of progress tasks to demonstrate understanding   | Group 0, full outer shell,<br>unreactive, i <mark>nert</mark>                                |  |
| 3      | How do alkali metals behave?                       | Completion of progress activities looking at the alkali metals         | Reactive, ion, reduction   |  |
| 4      | What are the halogens like?                        | Completion of progress activities looking at the halogens              | Halogens, halide, ion, oxi-<br>dation  |  |
| 5      | How can we explain trends in reactivity or groups? | Completion of exam questions to apply knowledge in alternative context | Atomic radius, attraction,<br>repulsion electron shield-<br>ing                              |  |
| 6      | How are transition and alkali metals different?    | Comparative writing and application to exam questions                  | Transition elements, typi-<br>cal metals, alkali metals                                      |  |