# Working Scientifically Progression

| Knowledge and Understanding | | | | Working Scientifically | | | |
|---|---|---|---|---|---|---|---|
| Explaining Science | | Classification | | Designing Experiments | Data, Tables and Graphs | | Making Conclusions |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | |

**Explaining Science**

| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| I remember simple facts about science with help | I remember some simple facts about science | I remember relevant science facts with some confidence | I use science ideas & facts to describe & explain | I show a developing K&U of science ideas & concepts | I show a clear K&U of science ideas & concepts | I show a secure K&U across all KS2 topics (facts & concepts) |
| I use science words during an activity with help | I use & remember relevant science words during activity | I use & remember science words over time (short term) | I remember science words I have used before (longer term) | I use simple science words correctly (meaning; apply) | I begin to use complex science words correctly | I use complex science words correctly (fluency) |
| I describe what is happening using words & actions | I describe what is happening using science with help | I use science to describe / recall what I have seen | I begin to use science models to describe (sequence) | I use science models to describe (what, where) | I use science models to describe & begin to explain (why, how) | I use science models to describe & explain (why, how, logical) |
| I use appropriate pictures & words to label items | I add science word labels (help) to diagrams | I add science labels & information (help) to diagrams | I add science labels & information to diagrams | I annotate diagrams to help describe & explain | I begin to draw & annotate my own diagrams | I draw & annotate my own diagrams to describe & explain |
| I begin to select facts to use in an answer with help | I select science facts to use in an answer with help | I select relevant science facts to use in an answer | I link relevant facts together in an answer | I 'cluster' related facts together into points (recalled) | I select & prioritise facts to create an argument/answer | I present a clear & logical argument / answer |

**Classification**

| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|
| I sort using instructions or pictures | I sort by using simple yes/no statements | I use simple spider keys with obvious differences | I use large sider keys with obvious differences | I use a range of spider keys with fine differences | I construct spider & use number keys | I construct both spider & number keys |
| I group by familiar features (size, colour, shape, etc) | I group by difference or similarity | I group by difference, similarity or change | I create groups for sorting (create criteria) | I create appropriate groups for sorting (create criteria) | I group & sub-group by easily observation (create criteria) | I group & sub-group by fine observation (create criteria) |
| I use my senses to identify properties of material | I link properties of materials to an application (help) | I link properties of materials to an application | I combine properties required for an application (help) | I describe combined properties required for an application | I explain how properties suit an application | I explain the science behind a range of properties |