

## Knowledge & Understanding

Explaining Science

Classification

## Working Scientifically

Designing Experiments

Data, Tables & Graphs

Making Conclusions

EYFS -----> KS1 -----> Secure

LKS2 -----> Secure

UKS2 -----> Secure ----->

Reception

Year 1

Year 2

Year 3

Year 4

Year 5

Year 6

Year 6+

### Explaining Science

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 show a deeper 'mastery' of K&U across KS2

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 use complex science words accurately & fluently

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 begin to apply science models to explain new events

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 draw & annotate my own diagrams (flow; complex)

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

I present an extended & logical argument / answer

### Classification

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 spider 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 construct both spider & number keys (complex)

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 group & re-group using combinations of criteria

I use my senses to identify properties of materials

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

I describe how material properties can change