UKS2 Skills - Science

Skills	Which year and topic are they covered in
Working Scientifically	
planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	
taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	
recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	
using test results to make predictions to set up further comparative and fair tests	
reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations	
identifying scientific evidence that has been used to support or refute ideas or arguments	
Asking Questions and Carrying Out Fair and Comparative Tests	
with growing independence, raise their own relevant questions about the world around them in response to a range of scientific experiences	
with increasing independence, make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions	
explore and talk about their ideas, raising different kinds of scientific questions	
ask their own questions about scientific phenomena;	
select and plan the most appropriate type of scientific enquiry to use to answer scientific questions	
make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them	
plan, set up and carry out comparative and fair tests to answer questions, including recognising and controlling variables where necessary	
use their test results to identify when further tests and observations may be needed	
use test results to make predictions for further tests	

Observing and Measuring Changes	
choose the most appropriate equipment to make measurements and explain how to use it accurately	
take measurements using a range of scientific equipment with increasing accuracy and precision	
take repeat readings when appropriate;	
understand why we take an average in repeat readings	
Identifying, Classifying, Recording and Presenting Data	
independently group, classify and describe living things and materials	
use and develop keys and other information records to identify, classify and describe living things and materials	
decide how to record data from a choice of familiar approaches	
record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar graphs and line graphs	
Drawing Conclusions, Noticing Patterns and Presenting Findings	
notice patterns	
draw conclusions based in their data and observations	
use their scientific knowledge and understanding to explain their findings	
read, spell and pronounce scientific vocabulary correctly	
identify patterns that might be found in the natural environment	
look for different causal relationships in their data	
discuss the degree of trust they can have in a set of results	
independently report and present their conclusions to others in oral and written forms	
Using Scientific Evidence and Secondary Sources of Information	
make links between their own science results and other scientific evidence	
use straightforward scientific evidence to answer questions or support their findings	
identify similarities, differences, patterns and changes relating to simple scientific ideas and processes	
recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations	