

Overview of TAPS plans for Focused Assessment of Working Scientifically

(Any focus can be chosen for open-ended enquiries, these are only suggestions)



	PLAN		DO		REVIEW	
	Ask Qs + plan enquiry	Set up enquiry	Observe + Measure	Record	Interpret + Report	Evaluate
R plans	Brown apples	Incy spider shelter	Frozen balloons	Scavenger sort	Butter	Taste test
KS1 (age 5-7) Develop close obs	Ask simple Qs and recognise that they can be answered in different ways*.	Perform simple tests	Observe closely, using simple equipment.	Gather and record data to help in answering questions.	Identify and classify. <i>Use appropriate scientific language to communicate ideas.</i>	Use their observations and ideas to suggest answers to questions.
Y1 TAPS plans	Materials: reflection test Materials: transparency	Materials: floating and sinking Teddy zipline	Plants: structure leaf look Shades of colour	Seasons: seasonal change Materials: Bridge testers	Animals inc Humans: animal classification	Animals inc Humans: body parts
Y2 TAPS plans	Materials: waterproof Separating colours	Materials: rocket mice Daisy footprints	Plants: compare growth Ice escape	Living things: woodlice habitats Materials hunt	Living things: nature spotters Living and nonliving	Animals inc H: handspans Materials: boat
LOWER KS2 (age 7-9) Develop systematic approach	Ask relevant questions and use different types* of scientific enquiries to answer them.	Set up simple practical enquiries, comparative and fair tests.	Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.	Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.	Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Identify differences, similarities or changes related to simple scientific ideas and processes.	Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Use straightforward scientific evidence to answer questions or to support their findings.
Y3 TAPS plans	Animals inc Humans: investigating skeletons Cupcake parachutes	Forces: shoe grip Forces: magnet tests	Plants: measuring plants Ice cream	Light: making shadows Forces: cars down ramps	Rocks: rock reports Eco Action	Plants: function of stem Forces: balloon rockets Materials: egg drop packaging
Y4 TAPS plans	Sound: investigating pitch Cornflour slime	Materials: drying materials	Materials: measure temp Electricity: Circuit products	Living things: local survey	Electricity: conductors Sound: string telephones	Animals inc H: teeth(eggs) in liq Materials: Dunking biscuits
UPPER KS2 (AGE 9-11) Develop independ- ence	Plan different types* of scientific enquiries to answer <i>their own questions</i> , including recognising and controlling variables where necessary.	Use test results to make predictions to set up further comparative and fair tests.	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.	Report and present findings from enquiries, inc conclusions and causal relationships, in oral and written forms such as displays and other presentations, <i>using appropriate scientific language.</i>	Explain degree of trust in results. Identify <i>and evaluate</i> scientific evidence (<i>their own and others</i>) that has been used to support or refute ideas or arguments.
Y5 TAPS plans	Mat: dissolving Mat: nappy absorbency Forces: paper planes	Materials: insulation layers Zipline testing	Humans: growth survey Forces: spinners Y5/6: Titanic pulleys	Materials: sugar cubes Space: craters Forces: Bottle flip	Materials: champion tapes Living things: life cycle research Solar system research	Forces: aquadynamics Forces: marble run Y5/6: Bridge engineers
Y6 TAPS plans	Electricity: bulb brightness Light questions	Animals inc Humans: heart rate	Elect: conductive dough Terrific tasters	Living things: outdoor keys Light: investigating shadows	Living things invertebrate research	Evolution: fossil habitats Evolution: egg strength
Transition	Reaction catches	Yeast growth	Formula 1 tubs	Blood splatter	Lolly stick catapults	Cleaning coins

*Types of enquiry including: observing changes over time, noticing patterns, grouping and classifying, comparative and fair tests, using secondary sources.

Progression statements are taken directly from England's 2014 National Curriculum, with small additions in italics from the 2018 Teacher Assessment Framework.