

Progression in Scientific Inquiry



plan



do

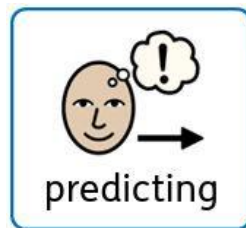
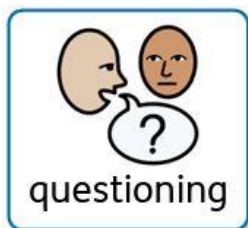


review

At Decoy, we use the Plan, Do, Review cycle to support focused and meaningful scientific inquiry. This approach is based on the **Teacher Assessment in Primary Science (TAPS)** project.

- **Plan:** Pupils plan a scientific investigation – such as a fair test or a research question – with increasing independence as they move from Key Stage 1 to Key Stage 2. They identify what needs to be done, which equipment to use, and what success will look like.
- **Do:** Pupils carry out their investigation and record their findings, with teachers providing guidance and support. As they progress through Key Stage 2, pupils become more confident and independent in their approach.
- **Review:** Pupils and teachers look carefully at the results, draw conclusions, and talk about what they might do differently next time. As children move through Key Stage 2, they take on more responsibility for analysing their findings and suggesting improvements themselves.

To further support this process, we have broken down each type of scientific inquiry to focus on specific working scientifically skills. Children from Nursery to Year 6 use the **Widgit symbols** shown below to help them identify and talk about which skill they are using.



Reception

<i>TAPs plan</i>	<i>Plan/Do/Review</i>	<i>Working Scientifically Skill(s)</i>
<i>Brown apples</i>	<i>Plan</i>	<i>Predicting</i>
<i>Incy spider shelter</i>	<i>Plan/Do</i>	<i>Planning</i>
<i>Frozen balloons</i>	<i>Do</i>	<i>Observing, measuring</i>
<i>Scavenger sort</i>	<i>Do</i>	<i>Recording</i>
<i>Butter</i>	<i>Review</i>	<i>Interpreting, reporting</i>
<i>Taste test</i>	<i>Review</i>	<i>Evaluating</i>

Year 1

<i>TAPs plan</i>	<i>Plan/Do/Review</i>	<i>Working Scientifically Skill(s)</i>
<i>Reflection test</i>	<i>Plan</i>	<i>Questioning, planning</i>
<i>Floating and sinking</i>	<i>Plan/do</i>	<i>Planning, predicting, testing</i>
<i>Plant structure</i>	<i>Do</i>	<i>Observing, measuring</i>
<i>Leaf look</i>	<i>Do</i>	<i>Observing, measuring</i>
<i>Seasonal change</i>	<i>Do</i>	<i>Recording</i>
<i>Animal classification</i>	<i>Review</i>	<i>Interpreting, reporting</i>
<i>Body parts</i>	<i>Review</i>	<i>Evaluating</i>

Year 2

<i>TAPs plan</i>	<i>Plan/Do/Review</i>	<i>Working Scientifically Skill(s)</i>
<i>Waterproof materials</i>	<i>Plan</i>	<i>Questioning, predicting, planning</i>
<i>Daisy footprints</i>	<i>Plan/do</i>	<i>Planning, testing</i>
<i>Plant growth</i>	<i>Do</i>	<i>Observing, measuring</i>
<i>Materials hunt</i>	<i>Do</i>	<i>Recording</i>
<i>Woodlice habitats</i>	<i>Do</i>	<i>Recording</i>
<i>Living and non living</i>	<i>Review</i>	<i>Interpreting, reporting</i>
<i>Hand spans</i>	<i>Review</i>	<i>Predicting, evaluating</i>

Year 3

<i>TAPs plan</i>	<i>Plan/Do/Review</i>	<i>Working Scientifically Skill(s)</i>
<i>Investigating skeletons</i>	<i>Plan</i>	<i>Questioning, planning</i>
<i>Magnet tests</i>	<i>Plan/do</i>	<i>Planning, testing</i>
<i>Measuring plants</i>	<i>Do</i>	<i>Observing, measuring</i>
<i>Car ramps</i>	<i>Do</i>	<i>Predicting, recording</i>
<i>Making shadows</i>	<i>Do</i>	<i>Recording</i>
<i>Rocks report</i>	<i>Review</i>	<i>Interpreting, reporting</i>
<i>Function of a stem</i>	<i>Review</i>	<i>Evaluating</i>

Year 4

<i>TAPs plan</i>	<i>Plan/Do/Review</i>	<i>Working Scientifically Skill(s)</i>
<i>Investigating pitch</i>	<i>Plan</i>	<i>Questioning, planning</i>
<i>Drying materials</i>	<i>Plan/Do</i>	<i>Planning</i>
<i>Measuring temperature</i>	<i>Do</i>	<i>Observing, measuring</i>
<i>Local survey</i>	<i>Do</i>	<i>Recording</i>
<i>Does it conduct?</i>	<i>Review</i>	<i>Predicting, interpreting, reporting</i>
<i>String telephones</i>	<i>Review</i>	<i>Interpreting, reporting</i>
<i>Teeth in liquid</i>	<i>Review</i>	<i>Predicting, evaluating</i>

Year 5

<i>TAPs plan</i>	<i>Plan/Do/Review</i>	<i>Working Scientifically Skill(s)</i>
<i>Dissolving</i>	<i>Plan</i>	<i>Questioning, planning</i>
<i>Insulating layers</i>	<i>Plan/do</i>	<i>Planning, testing</i>
<i>Growth survey</i>	<i>Do</i>	<i>Observing, measuring</i>
<i>Space craters</i>	<i>Do</i>	<i>Predicting, recording</i>
<i>Solar system research</i>	<i>Review</i>	<i>Interpreting, reporting</i>
<i>Aqua dynamics</i>	<i>Review</i>	<i>Evaluating</i>

Year 6

<i>TAPs plan</i>	<i>Plan/Do/Review</i>	<i>Working Scientifically Skill(s)</i>
<i>Bulb brightness</i>	<i>Plan</i>	<i>Questioning, planning</i>
<i>Heart rate poses</i>	<i>Plan/do</i>	<i>Planning, testing</i>
<i>Conductive dough</i>	<i>Do</i>	<i>Predicting, observing</i>
<i>Investigating shadows</i>	<i>Do</i>	<i>Questioning, recording</i>
<i>Outdoor keys</i>	<i>Do</i>	<i>Recording</i>
<i>Invertebrate research</i>	<i>Review</i>	<i>Interpreting, reporting</i>
<i>Fossil habitats</i>	<i>Review</i>	<i>Evaluating</i>