**TAPS Plan for Focused Assessment of Science**

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| **Topic:**  Materials | Year 5  Age 9-10 | Title:  Testing nappy absorbency |
| **Logo for planning strand of Working ScientificallyWorking Scientifically**  **Plan:** Plan different types of scientific enquiry, including recognising and controlling variables | | **Concept Context**  Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials |
| **Assessment Focus**   * Can children plan and carry out a fair test to compare the absorbency of different brand nappies? * Can children explain why the test is/is not fair? | | |
| **Activity** *Today we are going to be chemists*  What materials are used to soak up liquids? Consider when liquid needs to be soaked up, then contained without leakage. Refer to nappies e.g. packaging claim. How decide which brand/type to choose: what are the key requirements/options? (e.g. price, recycled, washable, long-lasting etc).  Today’s task is to set up a comparative investigation to find out which nappy absorbs the most water. Focus is on planning a fair test (have planning structures available, but they may need to test out their method before ‘writing up’ e.g. write instructions for another class to carry out the nappy investigation).  **[TAPS pyramid logo for Pupil box 2](https://taps.pstt.org.uk/active-pupils/)**  **Adapting the activity**  **Support:** with support (TA / scaffolding) discuss and decide what will make a good way to test and what needs to be done to keep the comparisons of 2 nappies fair. Record their results as a table  **Extension:** Independently plan a valid fair test. Compare and improve plans with an emphasis on how taking an average of repeated readings makes the results more reliable.  **Other ideas:** test other materials (e.g. absorbency of paper towels) or properties (e.g. cleaning of soap/toothpaste).  **Questions to support discussion**   * What are you trying to find out? What are you comparing? * What will you do? What will you measure? * What will you keep the same? What will you change? * How will you record your results? * How will you verify your results? (make sure they are accurate) * Photo of children putting water into a nappyHow will you know if you have conducted a good test/obtainedreliableresults? | | |
| **Assessment Indicators**  **Not yet met:** Say what is being changed. Needs support to explain what variables are kept the same and why.  **Meeting:** Clearly explains the plan for the test and identifies the variables (what to change, what to measure/observe, what important factors to keep the same). Makes a reasonable attempt to control these. E.g. *We will change the brand of nappy and record the how much water is left behind. They all go in a bowl filled with 500ml of water. We will keep the size of the nappy and the nappy dunking time the same.*  **Possible ways of going further:** Works systematically and identifies a range of factors to keep the same. Uses repeat readings and explains how this improves reliability. E.g. *We will take each reading three times and then find the average to improve the reliability of our results because it’s easy to make a mistake with one.* | | |

[TAPS pyramid logo for Pupil box 2](https://taps.pstt.org.uk/active-pupils/)Pupil box 2 - focus on science objectives. See TAPS pyramid for more egs.