

Interactive Planning Tool Guidance



Insert a title in the box **Our topic is**. Keep this open and generic, for example 'blowing bubbles' or 'electricity'.

Think of as many different variables that could be changed. Make the list as long as possible by repeatedly asking 'and what else' after an initial list has been created. Write the most appropriate variables, one in each box, in the **We could change** column of the interactive planning tool.

Now consider the things that could be measured, which might be affected by changing the variables. For example, if working with plants children might decide to measure the height of the plant, the length of the roots, the number of leaves, the total area of the leaves or the width of the whole plant. Each of these should be entered in a separate box in the **We could measure or observe** column.

Decide which variable to investigate and drag this down to the box **We will change**. This will automatically populate the **Control variables** box with all the things that will need to be kept the same. (To drag a box to a new location, click on the coloured tab on the left hand side.)

Decide what is going to be measured and drag this down into the **We will measure** box. Add the units of measurement to the **Units of measurement** box.

Use the chosen variable and thing to measure to complete the **Our question is** box. This can be as simple as *How does X affect Y*.

1. Prediction

Give children an opportunity to discuss what they think might happen and, more importantly, why. Enter this into the **What do we think will happen** and **Why do we think this will happen** boxes. Some children may need support to understand that this is their best idea, based upon information that they already have, from previous experiences, discussions, etc. Finding that their prediction is 'wrong' can be more valuable than getting the results that they expected.

2. Obtaining evidence

Under **Variable values** children enter the different values of the variable that they change. For example, if they are testing the thermal insulation of different materials they would write the names of the materials to be tested in each of these boxes; if they were testing the effect of different amounts of flour in a cake mixture they would write the varying amounts of flour used.

Once the measurements have been taken, they are added to **Measurement results**. For example, in the examples above this might be the temperature of a baked potato which had a single layer of the insulation material to be tested after a set period of time; or the density of cupcakes made with different proportions of flour.

3. Considering evidence and evaluating

Decide which chart or graph is most appropriate to show the findings and use the drop down menu to select the chosen form. The graph will then generate automatically.

Use the **What we changed** boxes and **This is what happened** boxes to write a sentence or two about what happened. Children may find this easier if they are encouraged to talk about what happened first.

Give children the opportunity to consider ways that they could improve their investigation and use this information to complete the **How we could improve what we did** box.