

**Date**

**T: plan and carry out a virtual investigation**

Copy the headings in bold into your book.

DO NOT copy the questions; they are to help you complete the sections.

**Aim**

*What are you trying to find out?*

**Prediction**

*What do you think your results will be?:*

- *think about what you are changing and what you are measuring*
- *explain your prediction (say why) using scientific language and reasoning*

**Method**

**Fair test** *(what would you keep the same? What one thing would you change?)*

**Equipment** *(what would you need to use?)*

**Instructions** *(what steps would you need to take to do the investigation? Include detail e.g. times, measurements of amounts)*

**Risk assessment** *(what hazards might there be? How could you reduce the risk from them?)*

**Results (table)**

**Results (graph) – draw this on the graph paper**

*Remember to (tick these off when you have done them):*

- *Think about how long your axis need to be before you draw them*
- *use a ruler*
- *give your graph a title*
- *start the y axis at 0, not 1*
- *write the numbers on the lines, not between the lines*
- *label the x axis and the y axis*
- *leave a space between the bars*
- *make all the bars the same width*

**Conclusions**

*Was your prediction right? Why / why not?*

*What did you find out? (write about your results, what you changed and what you measured)*

*Explain your results using scientific language and reasoning.*

*Overall was there much difference between the effectiveness of the toothpastes? Why / why not?*

*Do you think the experiment would have the same results if the teeth were stained with something different e.g. chocolate, wine? Why / why not?*

*Do you think the experiment would have the same results if different brands of toothpaste were used e.g. Colgate, Sainsbury's? Why / why not?*

*How easy or difficult would it be to make this experiment a fair test in real life? Why?*

*What did other people find out? If they got different results why might this have been the case?*

*Do the other peoples results make you think your own results are reliable? Why?*