 Inspiring scientific thinking – group activity

Complete the table below.

| Scientific thinking | Answer |
| --- | --- |
| Gathering evidence by observation (how do we know what we know?)   * What did you observe? * What patterns did you notice? * What did you expect to find and why? * How was it similar to what you thought? * How was it different to ………..? * Why do you think that ………..? * What might have caused ………..? * What evidence do you have? * What assumptions did you make? * How did you decide ……..? * What reasons did you have …………..? |  |
| Posing a testable question   * What would you like to find out? * What do you already know or think about it? |  |
| Planning a practical investigation   * What’s the best way to answer the question? * What kind of data will you need to collect? * What would you look for? * What variables (factors) need to be considered to make it a fair test? |  |
| Writing the hypothesis   * What is the independent variable? * What is the dependent variable? * How do I link these in a statement to be tested in a fair test? |  |
| Designing the method   * What things will I need? * Where will I do the investigation? * What steps will I take? * What things will I measure? |  |
| Recording   * How will I record my results? * Will I be recording qualitative or quantitative data? * How can I best communicate my information? * Who is my audience? |  |