Science understanding, Science inquiry

Logical/Mathematical

As part of her science project, Chloe wanted to find out how big salt crystals would grow under different conditions. She set up two 250 mL beakers and added 100 mL of water and 8 large spatulas of salt to both. She boiled both for 5 minutes on a hotplate. She then placed one beaker in the fridge and the other in a warm, dark place.

She left both beakers for a day and then sketched what she saw.

1 State what the purpose or aim was for Chloe’s experiment.

2 Identify the independent variable in Chloe’s experiment. This is the variable that Chloe changed in her experiment.

3 Identify the controlled variables in the experiment. These are the variables that Chloe controlled or kept the same.
4 Explain why Chloe used the same volume of water and the same amount of salt in both beakers.

5 Use the diagram to list her observations.

6 Identify the best conclusion for Chloe's experiment.
   A The experiment was fun and I learnt a lot.
   B Salt dissolves in water.
   C Salt forms crystals.
   D Cooler temperatures produced smaller crystals. ________________

7 Chloe then wanted to test how the size of crystals depended on the amount of salt added. Construct a dot-point method that she should follow.