1. Sunnil is carrying out an experiment in the lab.
   - Set up the lab – ¾ hour
   - Carry out the experiment – 1 hour 20 minutes
   - Clean up the lab – 30 minutes
   How long will it take him to do these jobs?

2. Pierre has kept a record of the weather on recent days.
   These are his results after 20 days.
   - Sunny 15 days
   - Wet 5 days
   Mark with a cross (X) the probability the day is sunny on the scale.

3. You have carried out research on the amount of sugar in certain food.
   ![Bar chart](chart.png)
   Using the bar chart how much sugar would there be in total in a slice of carrot cake and a flapjack?

4. Nelly is making soap. The recipes uses 5oz of lye water.

   1oz = 28g
   How many grams of lye water does Nelly need?

5. Amy is working out the boiling point of ethanol. She knows it boils at 78°C.

   ![Temperature conversion](conversion.png)
   Work out the temperature in Fahrenheit.

6. Riley has measured the sound levels of various items in their home in decibels.
   - Dishwasher – 55
   - Vacuum – 65
   - Hair Dryer – 90
   - Refrigerator – 50
   - Washing Machine – 55
   What is the mean sound level?

7. You have a recipe for making a set amount of soap.
   You need to amend the recipe for a different amount of soap.
   How would you do this?

8. Your college is buying pH testing strips. A pack costs £2.75 plus VAT.

   VAT is 20%
   How much would it cost to buy 5 packs?

9. Use a reverse calculation to check your answer to question 6.

Total Marks: ________ / 9