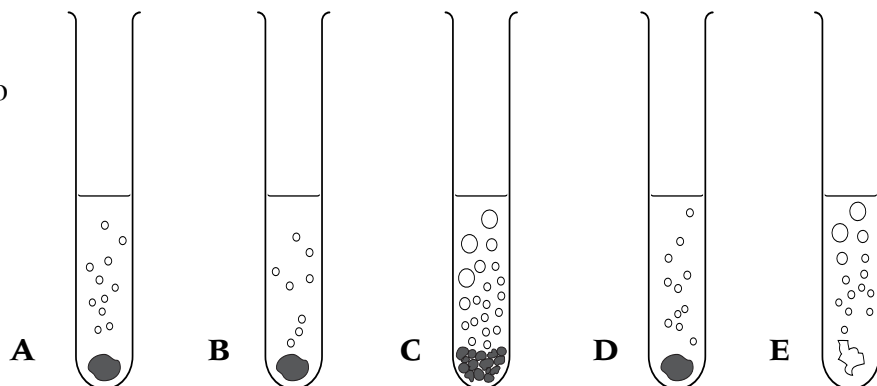


Sunita and Danny did an experiment using metals and acids. They wanted to see which metal reacted the fastest. This diagram shows their results.



- 1 How can you tell that the reactions are producing a gas?
- 2
 - a What is the gas that the reactions are producing?
 - b Describe how they could test for this gas. Write down the apparatus they would need, and what they would see happening.
- 3 Which metal reacted the fastest? Explain your answer.
- 4 Danny made a mistake in the experiment. Two of the metals were the same.
 - a Which two metals were the same as each other?
 - b How did you work out your answer?
- 5 Which things should Sunita and Danny keep the same each time to make sure their test is fair? You should be able to write down at least three things.
- 6
 - a Which chemicals are the reactants in the reaction?
 - b Which chemical is one of the products?
- 7 Use these clues to work out the names of the metals that Danny and Sunita tested, and which metal they did not test at all.
 - Zinc reacts faster than iron.
 - Copper does not react with acids at all.
 - Iron does not react as quickly as aluminium and magnesium.
 - Aluminium reacts faster than zinc, but not as fast as magnesium.

S knowledge