Worksheet: Exploring the Investigative World of Science

IGCSE · Class 8 · Science · 8 questions · 16 marks

Name: _____ Date: _____ Score: _____ / 16

Q1. In the puri experiment, which of these is something you can CONTROL rather than observe? *[1 mark]*

A) The number of seconds taken to puff

B) Whether the oil splattered

C) The thickness of each finished wall

D) The temperature of the oil

Q2. Why should only one factor be changed at a time in an experiment? *[1 mark]*

A) Because experiments must always be simple

B) So the experiment finishes faster

C) So you can tell which change caused the difference

D) Because changing two things is more work

Q3. On the pages of Curiosity, the root and the kite stand for: *[1 mark]*

A) Plants and animals

B) The past and the future of India

C) Roots of words and flying machines

D) Grounded observation and creative thinking

Q4. Rewrite the wondering "why does dough rise?" as a question you could actually investigate, and name what you would change and what you would measure. *[2 marks]*

Q5. A student writes: "A puri puffs because trapped steam inflates it, and the thinner side is the one that faced the oil last." What is wrong with presenting this as the answer? *[2 marks]*

Q6. Roughly how many grains of sand are on the world's beaches, and how does that compare with the number of stars in our galaxy? *[3 marks]*

Q7. Why is "what happens if I prick a hole in the puri before frying?" a better follow-up question than "what if I use a different brand of flour?" *[3 marks]*

Q8. Your friend says a kitchen is not a real laboratory, so nothing done there counts as science. How would you reply? *[3 marks]*