

Read the text and answer the questions below:

Why does coffee shoot out of the lid of your cup?

You're running late for work and you've purchased your coffee in a hurry. Just as you arrive at the office, a jet of hot liquid escapes from the tiny hole in the lid, leaving you with hot beverage residue on your clothes before the day has really started.

This is exactly what happened to Rob Kaczmarek after buying a cup of his favourite caffeinated drink. The marketing director at Convergent Science was intrigued by why the coffee shoots out so far and therefore set about modelling this, initially as a joke for those who enjoy a bit of computational fluid dynamics. It's the design of the lid that's the problem, he explains.

"It happens because of the sloshing of the coffee against the lid, which is kind of unique. At the end of the lid, the hole is right up above that. As the coffee sloshes against the end of the lid, that velocity is amplified and it splashes up through the actual hole."

Not all coffee cups are designed with a hole, of course. Some have lids with a tiny hole and others peel back to reveal a much larger gap, which offsets the shooting jets of hot liquid.

Choose the correct letter, A, B, C or D.

1. What accident might occur at work in the morning, after you bought coffee?

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| a) You spill it all over the place accidentally. | c) You contaminate your clothes with it. |
| b) You get burns from the hot coffee. | d) Nothing out of ordinary. |

2. Rob Kaczmarek explains to us that:

- a) The coffee shoots out very far.
- b) He sat his experiment as a joke.
- c) He was really intrigued by spilling the coffee.
- d) Coffee spills because of the design of the lid.

3. The main reason coffee spills is:

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| a) Velocity. | c) Design of the cup. |
| b) Sloshing. | d) It is not stated. |

4. This text might be classified as:

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| a) Scientific. | c) Fictional. |
| b) Humorous. | d) Romantic. |