Class 5 are investigating how quickly two different liquids cool over five minutes. They start their investigation by warming the two liquids in the microwave and then measure the temperature of each liquid every minute as they cool down.


-     -         - Blackcurrant Squash
-••• Orange Juice

1) What was the temperature of the orange juice after two minutes?
2) At which minute was the temperature of the blackcurrant squash $47^{\circ} \mathrm{C}$ ?
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3) By how many degrees did the temperature of the orange juice cool from minute 1 to minute 2?
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4) By how many degrees did the temperature of the blackcurrant squash cool from minute 3 to minute 4?
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5) Approximately, how long did it take for the temperature of the orange juice to drop by $10^{\circ} \mathrm{C}$ ?
6) By how many degrees did the temperature of the blackcurrant squash cool altogether?

7) Match each graph to the correct story and explain your reasoning.
A

©


Time
a) Zoe takes her hot chocolate out of the microwave. She then leaves the drink on the side to cool gradually before she drinks it at a pleasant temperature.
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b) Ayaan takes his soup out of the fridge. He pours it into a saucepan and heats it gradually up on the hob.

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$\qquad$
c) Zara takes her juice out of the fridge. The drink is too cold for her, so she warms it up quickly in the microwave. She must then wait a little while for it to cool so it isn't too hot to drink. But, when she does drink it, it is just right.
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8) Eddie wants to eat some soup. Based on this line graph, write a story about how the temperature of the soup changed over time.

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$\qquad$
Time $\qquad$
