

Thinking Like a Scientist; Links (correlations) and Causes.

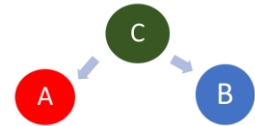
Mark Scheme

It is important to learn that links can point to important evidence of what causes something.



However we need to think carefully and check that there is not another thing which is causing the link we can see.

For each example think carefully about whether A causes B or whether you can think of another thing, lets call it C, which could cause a change in both A and B.



Example	Can you think of another reason (C) which would cause the link between A and B?
<p><b>A Children's shoe size</b> is linked to <b>B their reading ability</b>, the bigger the shoe size the higher the reading ability.</p>	<p><i>A child's shoe size is linked to their age (C), the older a child is the higher their reading ability (2 marks for a full answer such as the one above, 1 mark for a partial answer eg age)</i></p>
<p><b>A The number of ice creams sales</b> is linked to <b>B deaths by drowning</b> the higher the number of ice creams sold, the higher the number of drownings.</p>	<p><i>Warmer weather (C), causes a higher number of people swimming ( and unfortunately drowning) and the higher the number of ice cream sales. (2 marks for a full answer, 1 for partial answer eg warmer )</i></p>
<p>Since the 1950s, both <b>A the atmospheric CO<sub>2</sub> level</b> and <b>B obesity levels</b>, have increased sharply.</p>	<p><i>Increased car use (C) has caused increased CO<sub>2</sub> emissions and also to people being less active which has caused increased obesity. Causes related to increased consumption/manufacturing are also valid. (2 marks for a full answer, 1 mark for a partial answer eg consumption or cars)</i></p>
<p>Since the industrial revolution both <b>A the atmospheric CO<sub>2</sub> level</b> and <b>B global temperatures</b>, have increased.</p>	<p><i>Scientists agree that the changes seen in CO<sub>2</sub> levels have caused global temperatures to rise. They have looked for other causes and don't find any that could explain the close correlation/link. (2 marks for recognising that there is a causal link here)</i></p>