

Question 24 (5 marks)

Design an experiment that tests the effect of opening a window on the blood oxygen saturation level of the people in a room.

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Independent variable	Oxygen available in room (window open/shut)
Control	Window closed.
Variables to be kept constant and justification for keeping each constant.	<p>Variable 1: Number of people in a room, and the same people</p> <p>Justification: If the number of people in the room is not kept constant the experiment will not be reliable. Different numbers will result in different amounts of oxygen being used.</p> <p>Variable 2: Room being 'air tight'</p> <p>Justification: If extra for example a door is opened or another window, the oxygen available will not be consistent and the experiment will not be reliable or valid. There must be only one window open with people being equidistant from it.</p>
Technology used to measure oxygen saturation in blood	Blood Pulse oximeter