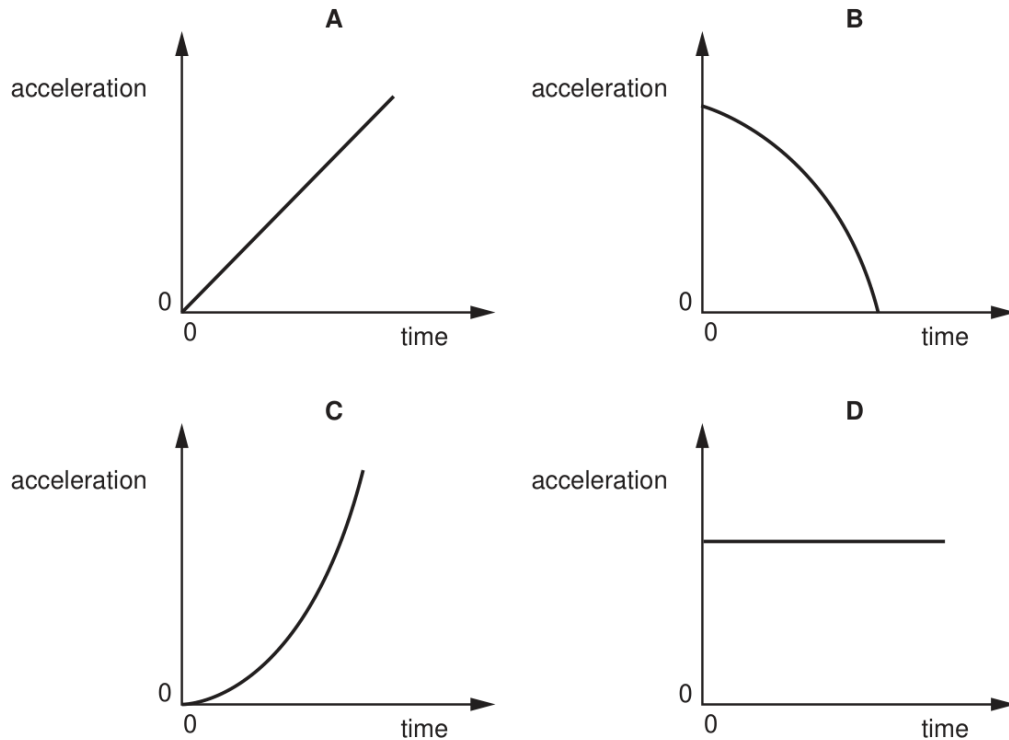


Smart Exam Resources
0625 / 0972 (9-1) IGCSE Physics
ACCELERATION OF FREE FALL

- 1 A stone falls freely from the top of a cliff into the sea. Air resistance may be ignored. Which graph shows how the acceleration of the stone varies with time as it falls?



- 2 Two stones of different weight fall at the same time from a table. Air resistance may be ignored. What will happen and why?

	what will happen	why
A	both stones hit the floor at the same time	acceleration of free fall is constant
B	both stones hit the floor at the same time	they fall at constant speed
C	the heavier stone hits the floor first	acceleration increases with weight
D	the heavier stone hits the floor first	speed increases with weight

3	A small steel ball is dropped from a low balcony. Ignoring air resistance, which statement describes its motion? A It falls with constant acceleration. B It falls with constant speed. C It falls with decreasing acceleration. D It falls with decreasing speed.															
4	Two stones of different weight fall at the same time from a table. Air resistance may be ignored. What will happen and why? <table><thead><tr><th></th><th>what will happen</th><th>why</th></tr></thead><tbody><tr><td>A</td><td>both stones hit the floor at the same time</td><td>the acceleration of free fall is constant</td></tr><tr><td>B</td><td>both stones hit the floor at the same time</td><td>they fall at constant speed</td></tr><tr><td>C</td><td>the heavier stone hits the floor first</td><td>acceleration increases with weight</td></tr><tr><td>D</td><td>the heavier stone hits the floor first</td><td>speed increases with weight</td></tr></tbody></table>		what will happen	why	A	both stones hit the floor at the same time	the acceleration of free fall is constant	B	both stones hit the floor at the same time	they fall at constant speed	C	the heavier stone hits the floor first	acceleration increases with weight	D	the heavier stone hits the floor first	speed increases with weight
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