

BRIGHT RED REVISION CARDS

These revision cards are packed full of great Higher Physics questions, diagrams, illustrations, answers and tips to help you to actively test your knowledge and ramp up your revision.

Each card covers a course topic which offers a mixture of multiple-choice and exam-style questions. Answers and explanations with key pointers are on the reverse.

- All key course topics covered in order
- Multiple-choice questions to get things going
- Exam-style questions to follow up

- Answers with short explanations
- **REMEMBER!** tips to shine a light on any harder concepts or questions

HOW TO USE

You can test yourself alone or with friends and should do so at spaced intervals when you feel confident about the topics you have studied. You can use the cards in any order to vary your approach and can shuffle the pack to mix things up a little bit!

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QUESTIONS

- 1** A runner accelerates from rest at 3 ms^{-2} for 1.5 s.
What is the distance travelled by the runner in this time?
- A** 2.25 m **C** 4.5 m
B 3.375 m **D** 6.75 m
- 2** A car accelerates uniformly from rest. The car travels a distance of 50 m in 5 seconds.
The acceleration of the car is
- A** 0.25 ms^{-2} **C** 10 ms^{-2}
B 4.0 ms^{-2} **D** 20 ms^{-2}
- 3** A ball is dropped from rest from a height of 12 m from the ground.
- a** Calculate the speed of the ball at the ground.
b Calculate the time taken to reach the ground.
- 4** A ball is thrown vertically up in the air with a speed of 8 ms^{-1} .
- a** Calculate the time taken for the ball to reach maximum height.
b Calculate the maximum height reached.

ANSWERS

1 **B** use $s = ut + \frac{1}{2}at^2$

2 **B** use $s = ut + \frac{1}{2}at^2$

3 **a** $v = 15.3 \text{ ms}^{-1}$ using $v^2 = u^2 + 2as$

REMEMBER! Square root for v .

b $t = 1.6\text{s}$ using $t = \frac{v-u}{a}$

4 **a** $t = 0.82\text{s}$ using $t = \frac{v-u}{a} = \frac{0-8}{-9.8}$

REMEMBER! Order of substitution is important.

b $s = 3.3 \text{ m}$ using $v^2 = u^2 + 2as \rightarrow 0^2 = 8^2 + 2(-9.8)s$