AQA - Forces – GCSE Physics

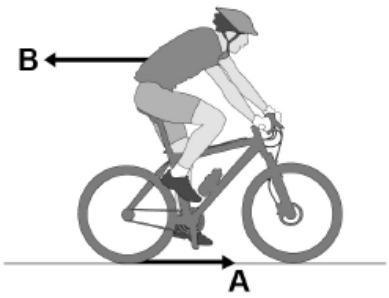
1. June/2021/Paper_2F/No.2(2.1_2.3)

0 2 **Figure 3** shows a cyclist on a bicycle.

The cyclist is moving at a constant velocity.

Arrows **A** and **B** represent the horizontal forces acting on the bicycle and cyclist.

Figure 3



0 2 . 1 What is force **A**?

[1 mark]

Tick (✓) **one** box.

- Air resistance ☐
- Friction ☐
- Tension ☐
- Upthrust ☐

0 2 . 2 What is force **B**?

[1 mark]

Tick (✓) **one** box.

- Air resistance ☐
- Magnetic ☐
- Tension ☐
- Upthrust ☐

0 2 . 3 What is the relationship between force **A** and force **B** when the cyclist travels at a constant velocity?

[1 mark]

Tick (✓) **one** box.

- **A = B** ☐
- **A > B** ☐
- **A < B** ☐

2. June/2021/Paper_2F/No.6(6.1_6.2)

0 6 The Sun is the closest star to the Earth.

0 6 . 1 A 2.5 kg mass would have a weight of 750 N at the surface of the Sun.

Calculate the gravitational field strength at the surface of the Sun.

Use the equation:

$$\text{gravitational field strength} = \frac{\text{weight}}{\text{mass}}$$

[2 marks]

Gravitational field strength = _____ N/kg

0 6 . 2 Gravity is a non-contact force.

Which of the following is also a non-contact force?

[1 mark]

Tick (✓) **one** box.

- Air resistance ☐
- Electrostatic ☐
- Friction ☐
- Tension ☐