



Name:

Class:

Student worksheet

8.1 Earth's gravity pulls objects to the centre of the Earth

Pages 144–145 and 210

Gravity

1 Write the definition of the following words:

a gravity

b gravitational field

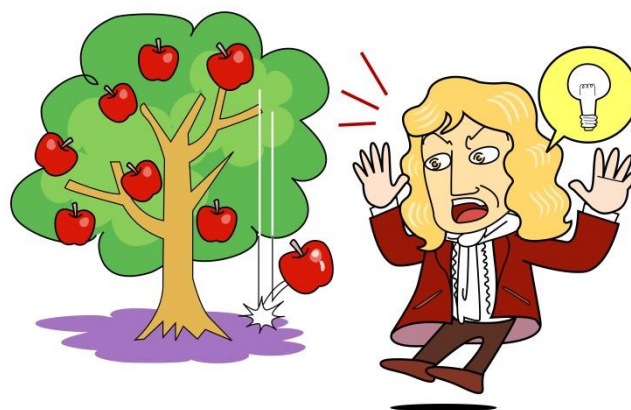
c weight

d mass

e newton

Isaac Newton is pictured below on the day he first pondered the idea of gravity.

2 Using the diagram, explain why the apple fell to the ground.



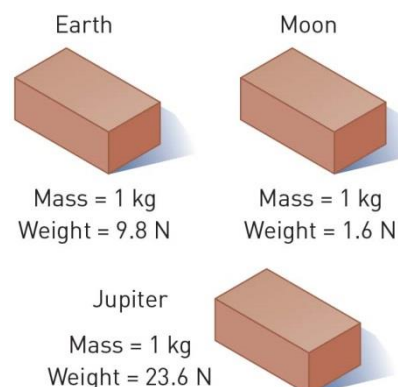


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- 3 The apple has a mass of 200 grams. Using the diagram of the bricks as a guide, what would its weight be:

- a on Earth? _____
- b on the Moon? _____
- c on Jupiter? _____



- 4 Assuming Newton's mass was 60 kilograms, what was his weight:

- a on Earth? _____
- b on the Moon? _____
- c on Jupiter? _____

- 5 In the space provided, draw a labelled diagram to explain why a tennis ball and a cricket ball would hit the ground at the same time when dropped from the same height.

EXTEND YOUR UNDERSTANDING

- 6 What were another five discoveries made by Sir Isaac Newton?