

Combined science - Physics - Key stage 4 - Forces

# **Sir Isaac Newton - A case study**

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# Independent Practice

Calculate the weight of a 12 kg object on Earth (9.8 N/kg).

Calculate the weight of a 350 g object on Earth. Give your answer to 2 significant figures.

Calculate the mass of an object 600 N object in Earth. Give your answer to 3 significant figures.

Calculate the mass of an object 7500 N object on Earth. Give your answer to 2 significant figures.



# Independent Practice

1. What is Newton's first law?

**If the resultant force acting on an object is zero and stationary**

**If the resultant force acting on an object is zero and moving....**

2. What is Newton's second law? (hint: think about the acceleration RPA)

3. What is Newton's third law?

**When two objects interact....**

4. Explain how walking demonstrates Newton's third law

