

Weight

- 1 Complete the following paragraph by filling in the missing words.

The weight of an object is measured in units called **newtons**. This means weight is a type of **force**. The weight of an object depends on the **gravitational field strength** which varies depending on where you are in the solar system. In deep space, you are described as weightless because there is very little or no **gravity**. Objects on the moon weigh less than on earth and therefore it is **easier** to launch a rocket from the moon's surface.

(5 marks)

- 2 In 1971, during a mission to the moon, astronauts did an experiment with falling objects. The experiment involved dropping a feather and a hammer at the same time to see which would land first.



- 2 (a) The mass of the hammer was 2.0 Kg. Calculate the weight of the hammer on the moon.

Gravitational Field Strength on the Moon = 1.5 N/Kg

Show your working.

2 x 1.5 [1 mark]

You get the full two marks if you just put the answer but you must show our working.

Weight of hammer =**3 N** ...
(2 marks)

(Total 7 marks)