

Fig. 2.1 shows a vehicle designed to be used on the Moon.

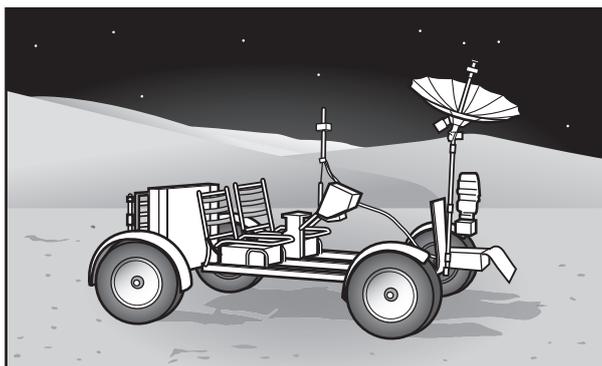


Fig. 2.1

The brakes of the vehicle are tested on Earth.

- (a) The acceleration of free fall on the Moon is one sixth ($\frac{1}{6}$) of its value on Earth.

Tick **one** box in each column of the table to predict the value of that quantity when the vehicle is used on the Moon, compared to the test on Earth.

	mass of vehicle on Moon	weight of vehicle on Moon	deceleration of vehicle on Moon with same braking force
10 × value on Earth			
6 × value on Earth			
same as value on Earth	same		same
$\frac{1}{6}$ × value on Earth		$\frac{1}{6}$	
$\frac{1}{10}$ × value on Earth			

[3]