


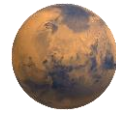

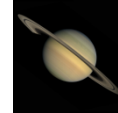
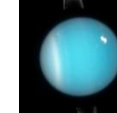
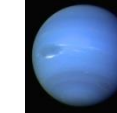
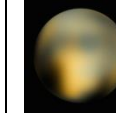


The strength of gravity on different places in the Solar System is given in the table below.

Strength of gravity (g) on the surface, in Newtons per Kilogram (N/kg)								
Mercury 	Venus 	Moon 	Mars 	Jupiter 	Saturn 	Uranus 	Neptune 	Pluto 
3.8	8.8	1.6	3.7	23.1	9.0	8.7	11.0	0.6

Use the formula **weight = mass x g** to answer the questions below.

- How much would a 10 kg suitcase weigh on the surface of...?
 - The Moon
 - Mars
 - Saturn
 - Pluto
- How much would a 25 kg suitcase weigh on the surface of...?
 - Mercury
 - Venus
 - Jupiter
 - Uranus
- What would be the mass of a 10 kg suitcase be on...?
 - Mercury
 - Venus
 - Neptune
- If you were sitting, on which place in the above table would it be easiest to stand up? Why?
- On which place from the table above would you have...?
 - The most weight
 - The most mass
- If you stood on Mars and lifted a 15 kg pack, you would be pulling with a force greater than...?
- If a 60 kg person was standing on a platform at the surface of Saturn and they jumped, they would have to push with a force greater than...?
- The Curiosity rover on Mars currently has a weight of 3,330 N. What is its mass?
- A person with mass of 60 kg standing on the dwarf planet Ceres would weigh 16.2 N. What is the strength of gravity on the surface of Ceres?
- Jupiter is made of gas (like Saturn, Uranus and Neptune). What would happen to the strength of gravity if you...?
 - Moved away from Jupiter
 - Fell in to Jupiter