

Lesson topic: Gravitational force
SCIENCE HOMEWORK (Due in a week)

of 10



Task 1. The strength of gravity on different celestial bodies of the Solar System is given in the box. Use the formula **Weight = mass · g** to answer the questions below.

Strength of gravity (g) on the surface, in Newton 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

1. How much would a 10 kg suitcase weigh on the surface of...?

a. The Moon

c. Saturn

b. Mars

d. Pluto

2. On which planet a 10 kg suitcase will have the highest weight?

a. Uranus

c. Saturn

b. Venus

d. Earth

3. On which planet would you have...

a. The highest weight?

b. The highest mass?

4. On which planets of our Solar System gravity strength is similar to Earth's gravity?

5. What mass would a 60-kg person have on Pluto?

6. 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?