

Check 1: astronaut on the Moon

The picture shows an astronaut standing still on the surface of the moon. Which of the following statements are true?

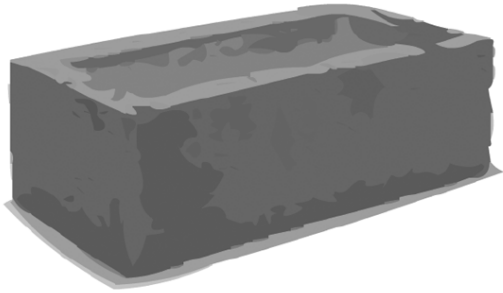


(tick all that apply)

- There is no gravity on the Moon but the astronaut is wearing heavy boots to keep his feet stuck on the ground.
- There is gravity on the Moon but it is not as strong as on the Earth.
- If the astronaut is standing still, there are no forces acting on the astronaut.
- The space helmet is needed because the atmosphere on the Moon is poisonous.
- The force of gravity depends on whether or not there is air around.

Check 1: a brick in two locations

A brick has a mass of 2 kg here on the surface of the Earth. When it is taken to the Moon which of the following statements will be true?



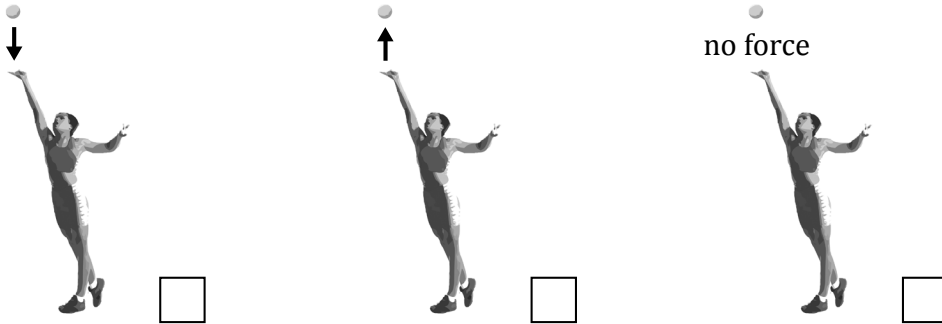
(tick all that apply)

- It will still have a mass of 2 kg
- Its mass will still be 2 kg but its weight will be zero
- Its mass and weight will now be reduced
- Its mass will still be 2 kg but its weight will be reduced
- Its weight will be less but its mass will have increased

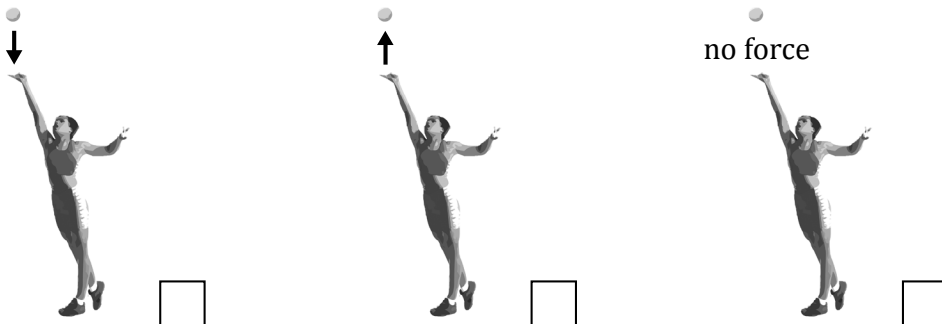
Check 1: a thrown ball

A person throws a tennis ball straight up into the air just a small way. These questions are about the TOTAL force on the ball. Tick all that apply.

a) If the ball is on the way up, then the force on the ball is shown by which arrow?



b) If the ball is just at the top of its flight, then the force on the ball is shown by which arrow?



c) If the ball is on the way down, then the force on the ball is shown by which arrow?

