

Physics student book pages **48,49** Review questions

**Q1:** B , D

**Q2:** Mass → amount of matter.

Weight → force due to a planet or moon.

Field → region in which an object experiences a force.

**Q4:** B,C

**Q5:** A,C

**Q6:** The gravitational field strength is smaller so it would go higher (and take longer to come down).

There is no air, so there is no air resistance.

**Q7:** a) Weight = Mass X gravitational field strength

$$65 \times 10 = 650 \text{ N}$$

b) Their mass will stay the same, because it is not affected by gravity. Their weight will be smaller (  $65 \times 3.7=240 \text{ N}$ ) because the gravitational field strength on Mars is smaller .

**Q 11:** If it is streamlined then there is less air resistance. Fewer air particles collide with the car, producing less force opposing the motion of the car, so less thrust is needed to reach a given speed.

**Q13:** Particles, force, vacuum, same.

**Q14:** A parachutist is falling down.