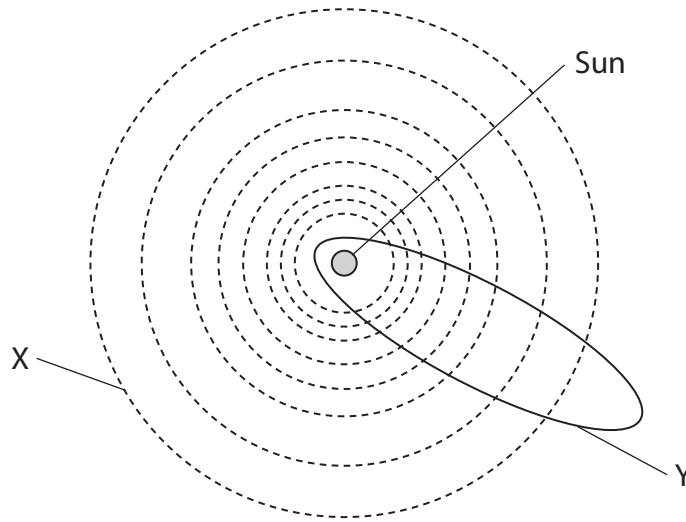


All questions are for both separate science and combined science students

1 The diagram shows the orbits of some objects in the Solar System.



(a) (i) Path X is the orbit of a (1)

- A comet
- B galaxy
- C planet
- D star

(ii) Path Y is the orbit of a (1)

- A comet
- B galaxy
- C planet
- D star

(b) The objects are held in orbit by (1)

- A electrostatic force
- B frictional force
- C gravitational force
- D magnetic force

(Total for Question 1 = 3 marks)

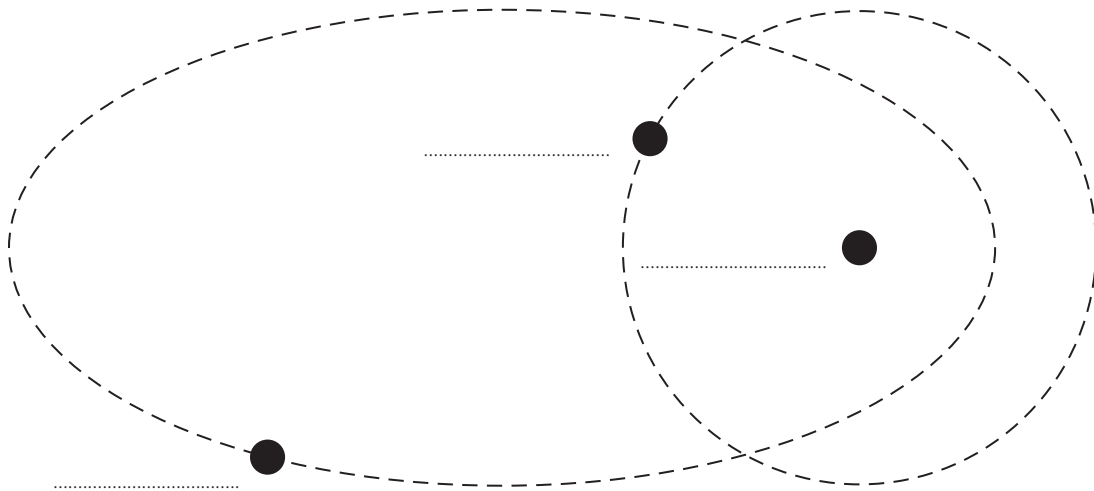
2 Planets and comets in our Solar System orbit the Sun.

(a) Which force causes planets and comets to orbit the Sun?

(1)

(b) The diagram shows the orbits of a planet and a comet around the Sun.

[not to scale]



(i) On the diagram, label the planet, the comet and the Sun.

(1)

(ii) Explain why it is possible for a planet and a comet in our Solar System to collide.

(2)

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(Total for Question 2 = 4 marks)