

Asteroids, Comets & Shooting Stars

1. Between the orbits of which two planets do most of the asteroids lie?

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2. (a) Describe the appearance of a meteor (a shooting star)

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(b) What is meant by the **radiant** of a meteor shower?

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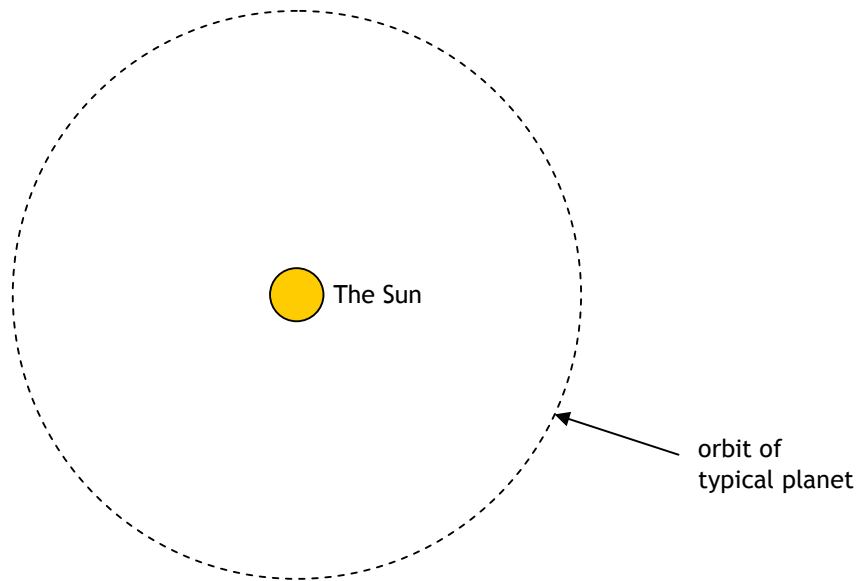
3. During certain times of the year, meteor showers can be seen on clear nights. What is the connection between meteor showers and comets?

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4. During recent years, there has been an increasing amount of evidence to suggest that the risk of a collision between a large meteoroid and the Earth is real. State two pieces of evidence to support this view.

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5. The diagram shows the orbit of as typical planet around the Sun.



(a) On the diagram, draw the orbit of a typical comet.

(b) Comets have often been described a 'dirty snowballs'. What evidence is there to suggest that this description is correct?

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(c) Most astronomers believe that the source of most long-period comets is the Oort Cloud. Briefly describe the nature and location of the Oort Cloud.

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