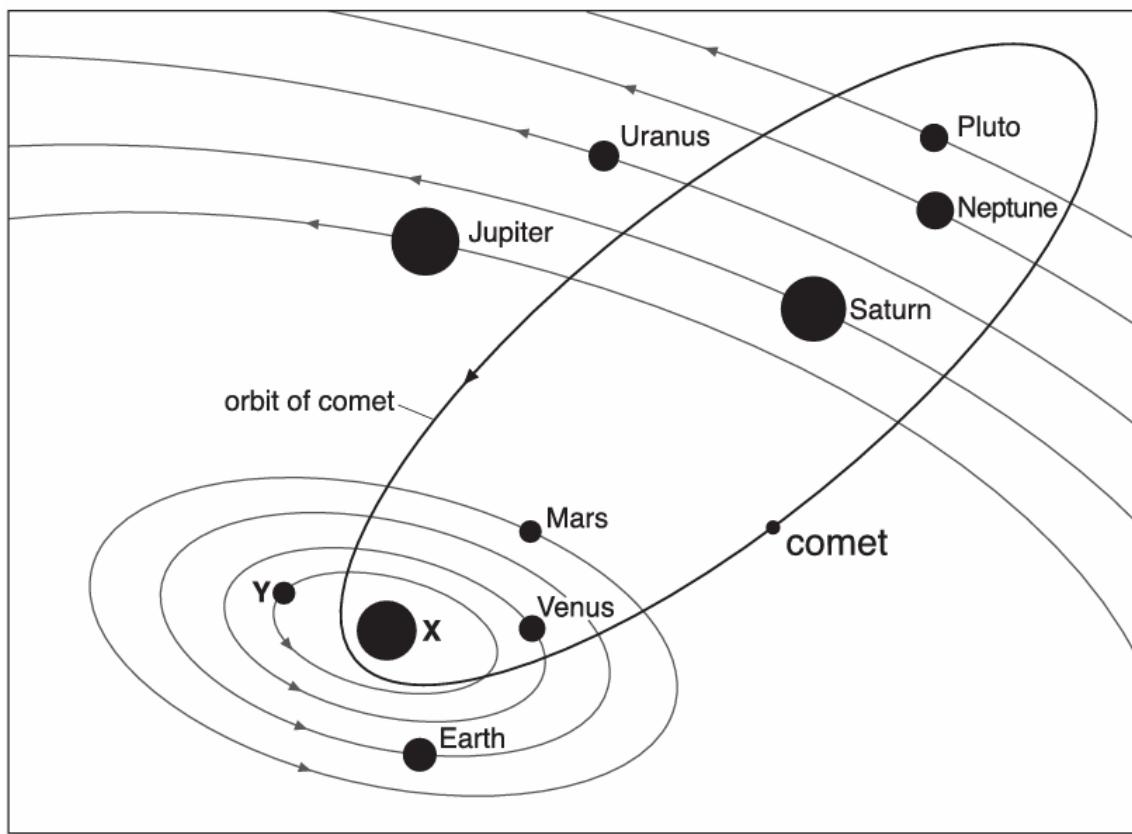


7. The diagram below shows part of the solar system.



not to scale

- (a) Look at the diagram.
Give the names of X and Y.

X _____

Y _____

- (b) It takes Jupiter much longer than Mars to complete one orbit.
Give **two** reasons for this.

1. _____

2. _____

- (c) The diagram opposite also shows the orbit of a comet.

In 1531, 1607 and 1683 scientists recorded that they had seen a comet in the sky.

- (i) Edmund Halley looked at these dates and suggested the scientists had all seen the same comet.

Explain how he worked out that it was the same comet each time.

- (ii) The comet was last seen in 1986.

Predict when it will be seen next.

Tier 3–6 5–7	Q No 13 5	Part	Mark	Answer	Accept	Additional guidance
		a 1/2m 3/2e	1	any one from * it absorbed water * its mass or weight increased	accept 'it soaks up water' accept 'the mass or weight of the granite or marble did not increase or change'	'granite or marble did not change' is insufficient
		b i 3/2d	1	any one from * it would crack * it would crumble or break up	accept 'the grains would move apart'	
		b ii 3/2d	1	* weathering	accept 'freeze-thaw' accept 'erosion'	
		c 3/3g	1	any one from * granite would not react with acid rain * marble reacts with acid rain	accept 'granite or it is not affected by acid rain or acid' accept 'granite would not erode or crumble or corrode' accept 'marble is affected by acid rain or rain' accept 'marble would erode' accept 'rain or pollution might have acid in it'	'granite does not react with air pollution' is insufficient <i>do not accept 'it would erode'</i>