

Question number	Answer	Notes	Marks
3 (a)	A - Force X 7.5 N, Force Y 7.5 N ;		1
(b)	idea that force X decreases; from 15 (N) / to 0 (N);	ignore references to force Y and moments 'it goes from 15 to 0' gets 2 marks	2

Total 3 marks

Total 9 marks

Question number	Answer	Notes	Marks
6 (a)	<p>any 3 of:</p> <p>MP1. idea of {rubbing / tearing} of {materials / surfaces};</p> <p>MP2. idea of movement / transfer of electrons;</p> <p>MP3. electrons have negative charge;</p> <p>MP4. (object becomes) negatively charged by gaining electrons OR positively charged by losing electrons;</p> <p>MP5. need for insulating material(s);</p>	<p>movement of positive {charge / electrons} can only score MP1 and MP5</p> <p>ignore 'friction'</p>	3
(b)	<p>any 2 of:</p> <p>MP1. idea of opposite charges OR positive and negative charges;</p> <p>MP2. idea of attraction;</p> <p>MP3. idea of an (attractive) force larger than the weight of the loose end of tape;</p>	<p>reject if mentions positive electrons</p> <p>ignore 'different'</p> <p>condone 'unlike'</p>	2

Total 5 marks