



Mark Scheme (Results)

Summer 2015

Pearson Edexcel International GCSE
Physics (4PH0) Paper 2P

Pearson Edexcel Level 1/Level 2 Certificate
Physics (KPH0) Paper 2P

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

Question number	Answer	Notes	Marks
5 (a) (i)	momentum = mass \times velocity;	allow symbols and rearrangements e.g. $p = m \times v$	1
(ii)	substitution into correct equation; evaluation; e.g. (momentum =) 0.23×13 = 3.0 (kg m/s)	allow 3, 2.99	2
(b)	<p>explanation in terms of conservation of momentum OR Newton's third law</p> <p>conservation of momentum - any 3 of:</p> <p>MP1. mention of conservation of momentum;</p> <p>MP2. momentum of snowball and skater;</p> <p>MP3. (are) equal and opposite;</p> <p>MP4. because momentum initially zero;</p> <p>OR</p> <p>Newton's third law - any 3 of:</p> <p>MP1. mention of {action and reaction / Newton III law};</p> <p>MP2. forces on skater and snowball;</p> <p>MP3. (are) equal and opposite;</p> <p>MP4. idea that (magnitude of) rate of change of momentum is same for both forces;</p>	<p>allow 'her' or similar to mean the skater allow e.g. -3.0 (kg m/s)</p> <p>allow 'her' or similar to mean the skater condone 'push' for force</p> <p>if no other mark awarded, allow 'because there is no / little friction' for 1 mark</p>	3

