

Question Number	Answer	Mark
<b>*12</b>	<p>(QWC – Work must be clear and organised in a logical manner using technical wording where appropriate)</p> <p>Child (X) exerts a force (to the right) on the ball (1)</p> <p>Due to N3 the ball exerts a (opposite) force on the child/boat (1) (To award MP2, cause and effect must be correct)</p> <p>There is a resultant/unbalanced/net force on the child/boat (1)</p> <p>Due to N1/N2 the child/boat will accelerate (1)</p> <p>When child (Y) catches the ball there will be a force on the child/boat to the right (1)</p> <p>The child/boat will decelerate (1)</p> <p>(For MP2 and MP4, ignore general statements of Newton's laws. They must be applied to the boat/child/ball)</p> <p>(Ignore anything about the reason for there being no movement initially. Ignore any discussion of the motion while the ball is in the air. Ignore any attempt to explain why the speed drops to zero at the end)</p>	<b>6</b>
	<b>Total for question 12</b>	<b>6</b>