## **Quizbit Individual Rubric**

Rubric item Description Points (Circle One)

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Completeness	Relevant physics	High level	Uses relevant physics in solution attempt	6
		Mid level	Some, but not all physical concepts used are relevant to the situation	4
		Low level	Physical concepts are mentioned	2
	All parts attempted	High level	All parts of problem have significant effort shown	6
		Mid level	Some parts of problem have significant effort shown	4
		Low level	Some parts of problem are started	2
Clarity of Communication	Legibility	High level	All parts of solution are legible	6
		Mid level	Some parts of solution are hard to read	4
		Low level	Significant parts of solution are hard and/or impossible to read	2
	Format	High level	Solution is highly organized and leads the reader through from start to finish in a logical, easy to follow manner	6
		Mid level	Solution is mostly organized, but it is necessary to hunt for important pieces	4
		Low level	Path of solution is hard to follow. Important pieces of solution are scattered and unlabeled.	2

Total:

## Quizbit Group Rubric

Rubric item Description Points (Circle One)

				(Circle One)
Completeness	Relevant physics	High level	Uses relevant physics in solution attempt	6
		Mid level	Some, but not all physical concepts used are relevant to the situation	4
		Low level	Physical concepts are mentioned	2
	All parts attempted	High level	All parts of problem have significant effort shown	6
		Mid level	Some parts of problem have significant effort shown	4
		Low level	Some parts of problem are started	2
Clarity of Communication	Legibility	High level	All parts of solution are legible	6
		Mid level	Some parts of solution are hard to read	4
		Low level	Significant parts of solution are hard and/or impossible to read	2
	Format	High level	Solution is highly organized and leads the reader through from start to finish in a logical, easy to follow manner	6
		Mid level	Solution is mostly organized, but it is necessary to hunt for important pieces	4
		Low level	Path of solution is hard to follow. Important pieces of solution are scattered and unlabeled.	2
	Part (a)	High level	Connects speed, distance, and time. Points towards what quantities are equal.  Correctly determines same amount of time.	6
		Mid level	Has some, but not all, of the elements of a high level solution.	4
		Low level	At least one of the pieces needed to form a correct solution.	2
		Low level	At least one of the pieces needed to form a correct solution.  Connects speed, distance, and time. Points towards what quantities are equal.  Correctly determines same amount of time. Can build off part (a).	2 6
SS	Part (b)		Connects speed, distance, and time. Points towards what quantities are equal.	
ectness	Part (b)	High level	Connects speed, distance, and time. Points towards what quantities are equal.  Correctly determines same amount of time. Can build off part (a).	6
Correctness	Part (b)	High level	Connects speed, distance, and time. Points towards what quantities are equal.  Correctly determines same amount of time. Can build off part (a).  Has some, but not all, of the elements of a high level solution.	6
Correctness	Part (b) Part (c), and (d)	High level Mid level Low level	Connects speed, distance, and time. Points towards what quantities are equal.  Correctly determines same amount of time. Can build off part (a).  Has some, but not all, of the elements of a high level solution.  At least one of the pieces needed to form a correct solution.  Clear evidence of the conundrum that ball B travels a longer distance but will be	6 4 2
Correctness		High level Mid level Low level High level	Connects speed, distance, and time. Points towards what quantities are equal. Correctly determines same amount of time. Can build off part (a).  Has some, but not all, of the elements of a high level solution.  At least one of the pieces needed to form a correct solution.  Clear evidence of the conundrum that ball B travels a longer distance but will be going faster along the bottom of the dip.	6 4 2 6
Correctness		High level Mid level Low level High level Mid level	Connects speed, distance, and time. Points towards what quantities are equal. Correctly determines same amount of time. Can build off part (a).  Has some, but not all, of the elements of a high level solution.  At least one of the pieces needed to form a correct solution.  Clear evidence of the conundrum that ball B travels a longer distance but will be going faster along the bottom of the dip.  Some discussion about longer distance OR faster speed.	6 4 2 6 4
Correctness		High level  Mid level  Low level  High level  Mid level  Low level	Connects speed, distance, and time. Points towards what quantities are equal. Correctly determines same amount of time. Can build off part (a).  Has some, but not all, of the elements of a high level solution.  At least one of the pieces needed to form a correct solution.  Clear evidence of the conundrum that ball B travels a longer distance but will be going faster along the bottom of the dip.  Some discussion about longer distance OR faster speed.  Any discussion of speed, distance, time, h, or w.  Clear evidence that the answer of who wins the race depends on both h and w.	6 4 2 6 4 2
Correctness	Part (c), and (d)	High level Low level High level Mid level Low level High level	Connects speed, distance, and time. Points towards what quantities are equal. Correctly determines same amount of time. Can build off part (a).  Has some, but not all, of the elements of a high level solution.  At least one of the pieces needed to form a correct solution.  Clear evidence of the conundrum that ball B travels a longer distance but will be going faster along the bottom of the dip.  Some discussion about longer distance OR faster speed.  Any discussion of speed, distance, time, h, or w.  Clear evidence that the answer of who wins the race depends on both h and w. Correctly uses parts (c) and (d) to point to different answers depending on h/w.  Some discussion about longer distance and faster speed. Some correct conclusions,	6 4 2 6 4 2 6