Physics > Big idea PFM: Forces and motion > Topic PFM2: Moving by force > Key concept PFM2.1: Describing speed

Progression toolkit: Describing speed

Learning focus	Speed is a measure of how fast an object travels: how far it goes in a given time				
As students' conceptual understanding progresses they can:	**CONCEPTUAL PROGRESSION** ⟶				
	Identify an object that has a higher speed because it travels further in a given time **P**	Identify an object that has a higher speed than another when they travel different distances in different times	Calculate the average speed of an object using speed = distance ÷ time	Explain why the average speed may be different to the instantaneous speed of an object	Identify when speed is changing the most quickly and acceleration is biggest
Diagnostic questions	High speed one	High speed two	Moving things	100m world record	Speed or acceleration?
					Acceleration
					Biggest acceleration
Response activities			Measuring top speed	Timing problems	**B** Is it accelerating?

Key:

P Prior understanding from earlier stages of learning   **B** Bridge to later stages of learning

Developed by the University of York Science Education Group and the Salters' Institute.

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High speed one	High speed two	Moving things	100m world record	Speed or acceleration?
Two tier multiple choice	Simple multiple choice	Simple multiple choice	Focused cloze	Focused cloze

Acceleration	Biggest acceleration	Measuring top speed	Timing problems	Is it accelerating?
Simple multiple choice	Two tier multiple choice	Sequencing process: practical	Sequencing process: demo.	Talking heads