

Activity: “Distance Time Graphs”

Subject/s: Mathematics	
Focus: <ul style="list-style-type: none"> • Mathematics > Statistics > Tables, Charts and Diagrams • Mathematics > Algebra > Graphs • Mathematics > Ratio, Proportion & Rates of Change • Mathematics > Reason Mathematically • Physics > Forces and Motion > Describing Motion 	
Age: 11-14	Time: 45 minutes
Prior Learning: <ul style="list-style-type: none"> • Reading and interpreting line graphs • An understanding of measures of time and distance 	
Lesson Objectives: Students will understand how journeys can be represented on a distance time graph They will be able to understand gradients representing different speeds and how curves represent periods of acceleration and deceleration.	
Resources: Lesson presentation, 2x worksheets, Distance time graph printable	Vocabulary: Distance, time, line, gradient, slope, journey, start, end, accelerate, decelerate, curve, average
Activities: Use the presentation to discuss the features of distance time graphs Have the students complete the worksheets and discuss their answers Show the distance time graphs and ask students to generate questions of their own based on the data	
Assessment opportunities: Worksheets, discussion, creative ideas in the final challenge	
Extension ideas: Use video analysis and datalogging technology to generate authentic data sets. Use such tools with the Model Rocket Car Challenge cars to present and analyse their performance. Use this in team presentations. Link to ideas in Physics about describing motion.	