

Critical Numeracy Teaching Activity

Boffins plan car faster than a speeding bullet

London
BRITISH researchers are planning to build a car capable of outrunning a speeding bullet.
It might sound like comic-book fantasy, but scientists see a rocket-propelled car lead the first car in the world capable of reaching 2000km/h.
If they can build it, the British Car, Vespene Super-car, our defense specialists, should be able to smash the land-speed record of 2000km/h by 2000.
Calculations also suggest it could reach 2000km/h ... that

... enough to overcome faster than a 337 Magnum revolver.
The 2000 car project was rejected by Science Minister Lord Dwyer.
The engineers have been secretly working on it for the past 10 months from the air-raid bunker in Devon.
The car was designed by Dwyer, a racing car enthusiast, as a target to inspire a new generation of scientists.
It will be the first to reach a top speed of a 2000km/h. The car is a rocket-propelled car with a combined thrust of 20000kg.

Mercury, 24/10/08, p17

How fast is that?

Grade: 9 Stage: 11
with emphasis on:
Maths Concepts: Number
Context: Science
Critical Numeracy: De-coding, Meaning-making, Using
Date of Article: 24/10/08, pg 17

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[Student Worksheet](#)

Teacher Guidelines:

This article reports that a new rocket propelled car has been designed to go faster than a speeding bullet. It contains five different uses for numbers and hence provides opportunities to help students see numbers in context and talk about the part they play in telling the story.

Decoding

The worksheet starts with students asked to list and describe the numbers in the story.

Meaning-making

Students are given the opportunity to make sense of the speed numbers by putting them into more manageable terms using a scale diagram. They will need to know the formula:

$$\text{speed} = \text{distance} / \text{time}$$

Using

What is the significance of making a car go this fast? Students are asked to do a *de Bono's* PMI (Plus, minus, interesting). The interesting category is often a very useful one in encouraging lateral thinking and obtaining a sense of how students are connecting their new knowledge with prior knowledge. A group discussion on this could reveal students' interesting concepts about speed and distance.