Year 09

Physics

Section 9Ic p. 136

Speed

**Working out how fast we move**

Car race line up 

In order to calculate the **speed** of the winning car, you need to know the following 2 parameters:

**distance** and **time**

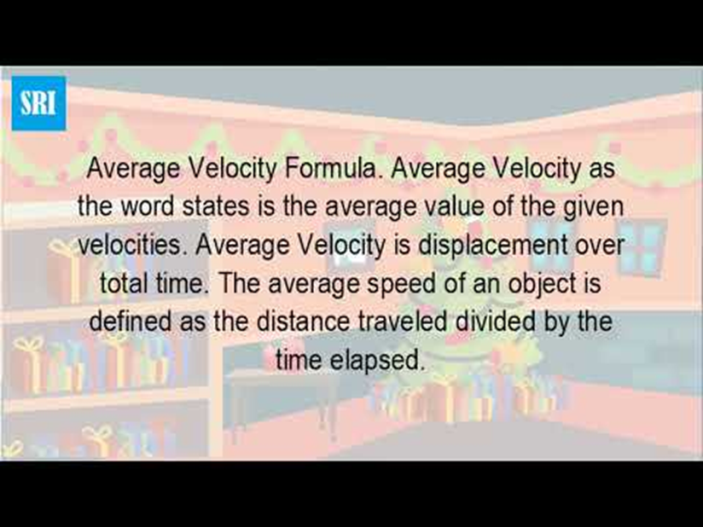
**How speed is calculated?**

By using the following formula:

*𝑠𝑝𝑒𝑒𝑑*=

units for measuring speed: **km/h**, **mph**, **m/s** depending of what we want to measure

**What is mean (average) speed?**



The average speed of an object is the total distance traveled by the object divided by the elapsed time to cover that distance.

**Was Nigel Mansel’s fastest speed higher or lower than 53.21 m/s?**



Obviously it must have been much higher because . . .

if we consider that for some moments he had stopped at the pits (0 m/s) . .

he had to compensate to get that average of 53.21 m/s

**The use of the formula and the speed triangle**

* By rearranging the original formula, we can also find:
* and
* distance = speed x time

