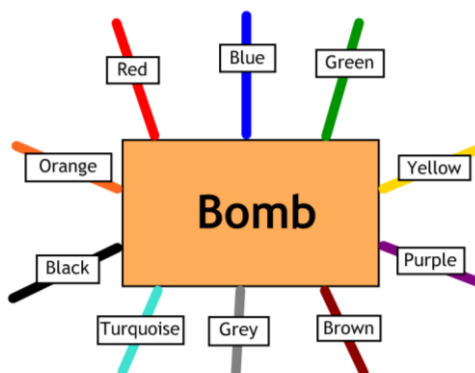


Defuse the Bomb - Error Intervals - Answers

The Mathematician, a notorious terrorist has planted a bomb. You must defuse that bomb using the mathematical clues he's left.



Answer the questions, then cut the coloured wires in the order that the answers appear, using the table below:

Red	Blue	Green	Yellow	Purple
$2000 \leq n < 4000$	$2999.5 \leq n < 3000.5$	$2995 \leq n < 3005$	$25 \leq n < 35$	$29 \leq n < 31$
Brown	Grey	Turquoise	Black	Orange
$2950 \leq n < 3050$	$2500 \leq n < 3500$	$2950 \leq n \leq 3049$	$25 \leq n \leq 34$	$29.5 \leq n < 30.5$

Here are the clues that show which order to cut the wires:

1	The length of a driveway is measured as being 30 metres, measured to the nearest 10 metres. What is the error interval for this measurement? Yellow
2	A ruler is said to be 30 centimetres long, measured to the nearest centimetre. What is the error interval for this measurement? Orange
3	A cash prize is said to be £3000 to the nearest thousand pounds. What is the error interval for the cash prize? Grey
4	A runner ran 3000 metres, rounded to the nearest 10 metres. What is the error interval for the distance the runner ran? Green
5	A road through a town is measured as being 3 kilometres long, to the nearest 100 metres. What is the error interval for the length of the road? Brown
6	The length of a kitchen worktop is measured at being 3 metres, measured to the nearest millimetre. State the error interval for the length of the kitchen worktop. Blue