

Student Name: \_\_\_\_\_

Grade: \_\_\_\_\_ Date: \_\_\_\_\_



1. The weight of the Olympic medals is: gold – 412 grams, silver – 412 grams, bronze – 357 grams. At the time of writing this question, Australia's competitors have won 7 gold medals, 10 silver medals and 10 bronze medals. Find the total weight of all those medals, in kilograms and grams.



2. Michael Phelps has broken an ancient Olympic record that has existed for centuries. Phelps broke the long-standing record that was set 2168 years ago for the number of gold medals won. In what year was the original record that Phelps broke set?

3. "Daffodil Day", on the 26<sup>th</sup> August, is a day the Cancer Council runs to raise funds for cancer research. They sell teddy bears named "Dougal" for \$10 each. If each bear costs \$4.50 to make, what percentage of the \$10 price of Dougal actually gets donated?



4. The book "The 13-Storey Treehouse" by Andy Griffiths is 240 pages long. If it took him 15 minutes per page to write half the pages, and an extra 5 minutes per page for the rest, how many days, hours, and minutes did it take to write the complete text?

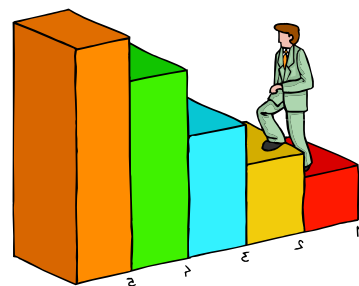


5. The game "Pokemon Go" relies on maths to determine where you are by having 3 satellites in space that talk to your phone! If the satellites are 160km above earth and they send new messages to your phone once every second, how fast do those messages travel in km/h?



6. For the 2016 Rio Olympics, the budgets for the Top 8 sports were: Swimming (\$38 million), Cycling (\$34 mill.), Rowing (\$32 mill.), Sailing (\$29 mill.), Hockey (\$29 mill.), Athletics (\$28 mill.), Basketball (\$21 mill.) and Canoeing (\$19 mill.). Show these amounts on a graph. If YOU PERSONALLY could rearrange these funds according to YOUR sport preferences, make up your own list, with \$ amounts.

7. **Open-ended Question:** Usain Bolt from Jamaica just won his third Olympics gold medal in the 100m sprint. In 2008 he won with a time of 9.69 seconds, in 2012 he won with 9.63 seconds, and this year he won with 9.81 seconds. Draw a graph showing these times. Use the graph to try to predict how long it would take him in the 2020 Games in Tokyo (if he didn't retire, and the same trend continued).



## ANSWERS – EdShop Worded Maths Extension Worksheet EW 31 16

1. 10 kg 574 g
2. 152 BC (*The solution obtained by doing this sum:  $2016 - 2168 = -152 = 152$  BC*)
3. 45%
4. 2 full days and 22 hours
5. 576,000 kph (*Solution: signal travels 160 km in 1 second, which is  $160 \times 60$  km in 1 minute, which is  $160 \times 60 \times 60 = 576,000$  kilometres in one hour*)
6. Various answers
7. Various answers