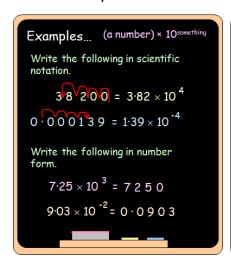
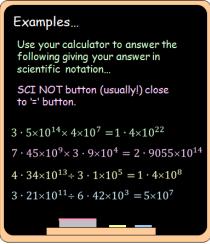
Outcome 3 - Scientific Notation & the Calculator

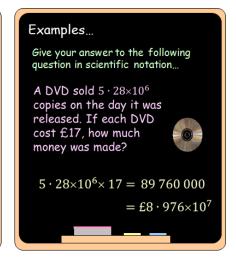
Bronze examples...



Silver examples



Gold example



Bronze Questions

Write the following in scientific notation...

- 8350
- **2** 7 209 000
- 38 200
- **\$** 543 200
- 0.6382
- 0.000 000 0405

Write the following in number form...

- **2** 6.37×10^{5} **8** 8.09×10^{7}
- 3.05×10^{-2} 4.027×10^{-6}

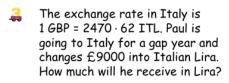
Gold Questions

Use your calculator to answer the following giving your answer in scientific notation...

The population of England is $5 \cdot 35 \times 10^7$. It is recommended that they should each drink 2.6 litres of water per day. How many litres is this altogether?



The speed of light is approximately $3 \cdot 8 \times 10^8$ metres per second. How far will light travel in 123 seconds?

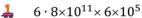


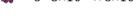


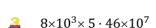
Silver Questions



Use your calculator to answer the following giving your answer in scientific notation...







 $8 \cdot 24 \times 10^8 \times 9 \cdot 3 \times 10^7$

 $7 \cdot 77 \times 10^9 \div 3 \cdot 7 \times 10^4$

 $2 \cdot 382 \times 10^{21} \div 6 \times 10^{8}$

 $2 \cdot 624 \times 10^{17} \div 3 \cdot 28 \times 10^9$











Bronze Answers

1. $8 \cdot 35 \times 10^3$ 2. $7 \cdot 209 \times 10^6$

3. $3 \cdot 82 \times 10^4$

4. $5 \cdot 432 \times 10^5$

5. $6 \cdot 382 \times 10^{-1}$ 6. $4 \cdot 05 \times 10^{-8}$

7. 637 000 8. 80 900 000 9. 0.0305 10. 0.000 004027

Silver Answers

1. $4 \cdot 08 \times 10^{17}$ 2. $7 \cdot 6632 \times 10^{16}$

3. $4 \cdot 368 \times 10^{11}$ 4. $2 \cdot 1 \times 10^5$

5. $3 \cdot 97 \times 10^{12}$ 6. 8×10^7

Gold Answers

1. $1 \cdot 391 \times 10^8$

2. $4 \cdot 674 \times 10^{10}$

3. $2 \cdot 223558 \times 10^7$