

## Standard Form Exam Practice



- Q1. Write 530,000,000 in standard form. (1 mark)
- Q2. Write 230500000 in standard form. (1 mark)
- Q3. Write 0.007 in standard form. (1 mark)
- Q4. Write 0.000802 in standard form. (1 mark)
- Q5. Write  $5.2 \times 10^4$  as an ordinary number. (1 mark)
- Q6. Write  $4.203 \times 10^8$  as an ordinary number. (1 mark)
- Q7. Write  $1.39 \times 10^{-3}$  as an ordinary number. (1 mark)
- Q8. Write  $9.25 \times 10^{-6}$  as an ordinary number. (1 mark)

### Arithmetic using Standard Form:

- Q9. Work out  $(4 \times 10^3) \times (8 \times 10^2)$  giving your answer in standard form. (2 marks)
- Q10. Work out  $(2.8 \times 10^2) \times (8.9 \times 10^4)$  giving your answer in standard form. (2 marks)
- Q11. Work out  $(4.6 \times 10^2) \times (5.0 \times 10^{-6})$  giving your answer in standard form. (2 marks)
- Q12. Work out  $(6 \times 10^5) \div (8 \times 10^2)$  giving your answer in standard form. (2 marks)
- Q13. Work out  $(3.9 \times 10^2) \div (4.5 \times 10^{-3})$  giving your answer in standard form. (2 marks)



Q14. Work out  $(2 \times 10^3) + (1.8 \times 10^2)$  giving your answer in standard form. (2 marks)

Q15. Work out  $(3.2 \times 10^4) - (5.3 \times 10^3)$  giving your answer in standard form. (2 marks)

Q16. Work out  $\frac{0.8 \times 0.4}{0.02}$  giving your answer in standard form. (2 marks)

Q17. Work out  $\frac{2 \times 10^4 \times 3.2 \times 10^3}{4 \times 10^5}$  giving your answer in standard form. (2 marks)

### Problem Questions

Q18. The side of a cube is  $4 \times 10^3$  cm. Work out the volume of the cube, giving your answer in standard form. (3 marks)

Q19. Put the following numbers in order starting with the largest.  
 $0.52 \times 10^2$ ,  $0.00031 \times 10^5$ ,  $5300 \times 10^{-3}$ ,  $3 \times 10^1$  (2 marks)

Q20. The volume of Pluto is  $7 \times 10^9$  km<sup>3</sup> and the volume of the sun is  $1.4 \times 10^{18}$  km<sup>3</sup>. Work out how many times Pluto could fit inside the sun, giving your answer to the nearest whole number. (3 marks)

Q21. Which of these is not a square number? Explain your choice.  
 $36 \times 10^2$ ,  $49 \times 10^6$ ,  $81 \times 10^3$ ,  $400 \times 10^8$ ,  $25 \times 10^6$  (2 marks)

Q22. The area of three islands A, B and C are shown below:

A	$0.347 \times 10^8$ km <sup>2</sup>
B	$13.8 \times 10^6$ km <sup>2</sup>
C	420003000 km <sup>2</sup>

Mike says that the total area of island A and island B is greater than the area of island C. Is he correct? You must explain your answer. (2 marks)

