GCSE Maths

Numbers
Standard Form

Name:
Date:

Materials
You can use a calculator for these questions

Tips
Show how you worked out the answer if you can.

Simple Questions

1.   Write 4,500 in standard form.

     Answer _____ **[1 mark]**

2.   Express 0.007 in standard form.

     Answer _____ **[1 mark]**

3.   Convert 3.2×10^5 to an ordinary number.

     Answer _____ **[1 mark]**

4.   Write $1,200,000$ in standard form.

     Answer _____ **[1 mark]**

5.   Express 5.6×10^{-3} as an ordinary number.

     Answer _____ **[1 mark]**

Medium Questions

6.   Multiply $(3 \times 10^4) \times (2 \times 10^3)$ and give your answer in standard form.

Answer _____ **[2 mark]**

7.   Divide $(6 \times 10^6) \div (2 \times 10^2)$ and give your answer in standard form.

Answer _____ **[2 mark]**

8.   Express 0.000045 in standard form.

Answer _____ **[2 mark]**

9.   Convert 7.1×10^{-2} to an ordinary number.

Answer _____ **[2 mark]**

10.   Evaluate $(2.5 \times 10^3) + (3.1 \times 10^4)$ and write the answer in standard form.

Answer _____ **[2 mark]**

Difficult Questions

11.   Simplify and express in standard form $(4 \times 10^5) \times (6 \times 10^{-3})$.

   Answer _____ **[3 mark]**

12.   Evaluate $(9 \times 10^7) \div (3 \times 10^2)$ and write your answer in standard form.

   Answer _____ **[3 mark]**

13.   The distance from Earth to the Moon is approximately 3.84×10^5 km.
   The distance from Earth to the Sun is approximately 1.5×10^8 km.
   How many times further is the Sun than the Moon?
   Express your answer in standard form.

   Answer _____ **[3 mark]**

14.   Convert 0.00000089 to standard form.

   Answer _____ **[3 mark]**

15.   Solve for x in $(2.5 \times 10^x) = 250,000$.

   Answer _____ **[3 mark]**