



1. Write the following numbers in scientific notation:

- |               |                  |                            |
|---------------|------------------|----------------------------|
| (a) 4800      | (b) 6780         | (c) 31000                  |
| (d) 35 200    | (e) 54 350       | (f) 970 000                |
| (g) 487 000   | (h) 109 100      | (i) 4 400 000.             |
| (j) 7 million | (k) 12.5 million | (l) $5\frac{1}{4}$ million |

2. This table gives the areas of various stretches of water throughout the world. Write each of the areas in scientific notation.

<i>Sea / Ocean</i>	<i>Area (km<sup>2</sup>)</i>
Pacific Ocean	165 380 000
Atlantic Ocean	82.21 million
Indian Ocean	73.6 million
Mediterranean	2 510 000
River Clyde	2 130
Loch Ness	56
English Channel	103 600

3. Change each of the following from scientific notation to number form :-

- |                         |                       |                        |                           |
|-------------------------|-----------------------|------------------------|---------------------------|
| (a) $3.8 \times 10^4$   | (b) $7.5 \times 10^2$ | (c) $3.24 \times 10^5$ | (d) $6.47 \times 10^3$    |
| (e) $1.478 \times 10^4$ | (f) $3 \times 10^1$   | (g) $9 \times 10^6$    | (h) $2.9 \times 10^6$     |
| (i) $6.014 \times 10^4$ | (j) $7 \times 10^7$   | (k) $5.37 \times 10^7$ | (l) $8.888 \times 10^8$ . |

4.

<i>Player</i>	<i>Valuation</i>
Figo	$\pounds 1.525 \times 10^7$
Woodgate	$\pounds 5.75 \times 10^6$
Novo	$\pounds 8.755 \times 10^5$
Coyle	$\pounds 3.285 \times 10^4$
McCracken	$\pounds 1.004 \times 10^2$

This table shows the valuation of certain football players as of June 2004.

Write out each of the valuations in full.

5. Write the following small numbers in scientific notation :-

- |               |               |              |               |
|---------------|---------------|--------------|---------------|
| (a) 0.05      | (b) 0.000 092 | (c) 0.0274   | (d) 0.000 002 |
| (e) 0.000 175 | (f) 0.368     | (g) 0.001 81 | (h) 0.000 09. |

6. Write the following numbers in full :-

- |                             |                          |                           |                              |
|-----------------------------|--------------------------|---------------------------|------------------------------|
| (a) $3.9 \times 10^{-2}$    | (b) $2.1 \times 10^{-4}$ | (c) $4.97 \times 10^{-3}$ | (d) $7.02 \times 10^{-5}$    |
| (e) $3.2748 \times 10^{-1}$ | (f) $5 \times 10^{-3}$   | (g) $9 \times 10^{-5}$    | (h) $3.007 \times 10^{-6}$ . |