

Maths Problems.

$$\begin{array}{r} 1. \quad 1895 \\ - 1822 \\ \hline 0073 \end{array}$$

Louis Pasteur was 73 years old when he died.

$$2. \quad 933 \text{ km}$$

kilo means 1000, so I need to multiply by 1000 to work out what this is in m.
 $\times 1000 =$ moves 3 spaces left.

H	T	T	H	T	U
			9	3	3
			\longleftarrow \longleftarrow \longleftarrow		
9	3	3	0	0	0

It is 933,000 m from Upham to Arbois in France.

$$\begin{array}{r} 3. \quad 1778 \\ - 1707 \\ \hline 0071 \end{array}$$

Carolus Linnaeus was 71 years old when he died.

$$4. \quad 1978 \text{ km.}$$

I need to \times by 1000 again

H	T	T	H	T	U
			1	9	7
			8		
			\longleftarrow \longleftarrow \longleftarrow		
1	9	7	8	0	0

It is 1,978,000 m from Upham to Smaland in Sweden.

5. 40 million in 1g.
↓
40,000,000

a) 10g means $\times 10$. so move one space left.

H H T M M H H T M Th H T U
40,000,000
400,000,000

In 10g^{of soil}, there could be
400,000,000
(400 million) bacteria.

b) 100g means $\times 100$.

B H H T M M H H T M Th H T U
40,000,000
4,000,000,000

In 100g of soil, there could
be 4,000,000,000
(4 billion) bacteria.

c) 56g means $\times 56$.

$$6 \times 40,000,000 = 240,000,000$$

$$50 \times 40,000,000 = 2,000,000,000$$

$$\text{Total} = 2,240,000,000.$$

In 56g. of soil, there could be 2,240,000,000
bacteria.

6. $1.5 \text{ million} = 1,500,000$

It is estimated that there are at least 1,500,000 different species of fungi.

7. 7 days. There are 24 hours in a day.

$$\begin{array}{r} 24 \\ \times 7 \\ \hline 168 \\ \hline 2 \end{array}$$

You can be infectious with chicken pox for 168 hours.

8. $183 \div 3$.

$$\begin{array}{r} 068 \\ 3 \overline{) 183} \end{array}$$

There were 68 protozoa in the line.

oops I made a mistake when I did this the first time!!

9.

$$\begin{array}{r} 40 \\ + 14 \\ + 8 \\ + 45 \\ + 2 \\ \hline 109 \\ \hline 1 \end{array}$$

There are 109 phyla across all five kingdoms.