

Germs Worded Problems

$$\begin{array}{r} 2020 \\ - 1901 \\ \hline 0119 \end{array}$$

Yellow fever virus was discovered
119 years ago.

2. 21,642,274 people died from Spanish flu.

$$\begin{array}{r} 400 \\ \times 5 \\ \hline 2000 \end{array}$$

If there are 5 bacteria in your
toilet, then there are 2000
bacteria on your desk.

$$\begin{array}{r} 400 \\ \times 12 \\ \hline 800 \quad (\times 2) \\ 4000 \quad (\times 10) \\ \hline 4800 \end{array}$$

If there are 12 bacteria in
your toilet, then there are
4800 bacteria on your
desk.

$$c) 240,000 \div 400$$

$$\text{I know } 24 \div 4 = 6.$$

$$\text{So } 240 \div 40 = 6$$

$$\text{and } 2400 \div 400 = 6.$$

$$\text{so } 240,000 \div 400 = 600.$$

If there are 240,000 bacteria on your
desk, then there are 600 bacteria in
your toilet.

4. 1.8 m

- a) I know there are 100 cm in 1 m.
So I need to \times by 100.
This means move 2 spaces left.

$$\begin{array}{r} \text{H T U} \cdot \text{t} \\ 1 \cdot 8 \text{ 0} \cdot \\ \hline 1 \text{ 8 0} \cdot \end{array}$$

The cloud of water can shoot 180 cm
in the air.

- b) I know there are 10 mm in 1 cm.
So I need to \times by 10.
This means move 1 space left.

$$\begin{array}{r} \text{Th H T U} \cdot \text{t} \\ 1 \cdot 8 \text{ 0} \cdot \\ \hline 1 \text{ 8 0 0} \cdot \end{array}$$

The cloud of water can shoot
1800 mm in the air.

5. I know there are 60 seconds in one minute.

$$20 + 20 + 20 = 60$$

So I can wash my hands 3 times in one minute.

a) 10 times.

$$10 \div 3 = 3 \text{ r } 1.$$

So 3 minutes and 20 seconds to wash my hands 10 times.

b) 20 times.

$$20 \div 3 = 6 \text{ r } 2.$$

So 6 minutes and 40 seconds to wash my hands 20 times.

c) 15 minutes.

1 minute = 3 times.

$$15 \times 3 = 45.$$

In 15 minutes, I can wash my hands 45 times.