



# Scales and Sizes Answers

How many bacterial cells would fit across a full stop?

Answer: **100 cells**

How many viruses would fit across a full stop?

Answer: **3,000 cells**

How many more viruses can fit across a full stop compared to bacterial cells?

Answer: **2,900 viruses**

You could also think about how many bacteria could cover other surfaces? How about a stamp or a 5 pence peice?

Answer: **If the diameter of the coin is 18mm, we need to firstly convert mm to  $\mu\text{m}$ .**

**Now divide  $18,000\mu\text{m} / 3\mu\text{m} = 6000$  bacterial cells can fit across the 5 pence piece.**

**The same calculations for the stamp, except the diameter of the traditional stamp is 21mm.**