## Cell Mathematics - YOU MUST SHOW ALL OF YOUR WORK!

A hen's egg is about 50 mm in diameter. A human egg is about 0.14 mm in diameter. What is the difference in size between the hen's egg and the human egg?
$\qquad$ mm

A drop of blood contains five million red blood cells and ten thousand white blood cells. How many times more blood cells are there than white blood cells?
$\qquad$ times

The nucleus of a cell is about 0.000625 cm in diameter. What is the diameter of this nucleus expressed in millimeters?
$\qquad$ mm

A biologist notices that a Petri dish is becoming covered with colonies of bacteria. The doubling rate of the bacterial colony is one day. At the end of 30 days, the plate is covered with bacteria. When was the Petri dish half-covered with bacterial colonies?
$\qquad$ day(s)

A single cell reproduces by mitosis (reproduction by dividing in half). How many cells will be present at the end of the first division?
$\qquad$ cells
At the end of the second division? $\qquad$ cells
$\qquad$ cells
At the end of the fifth division? $\qquad$ cells
$\qquad$ cells

