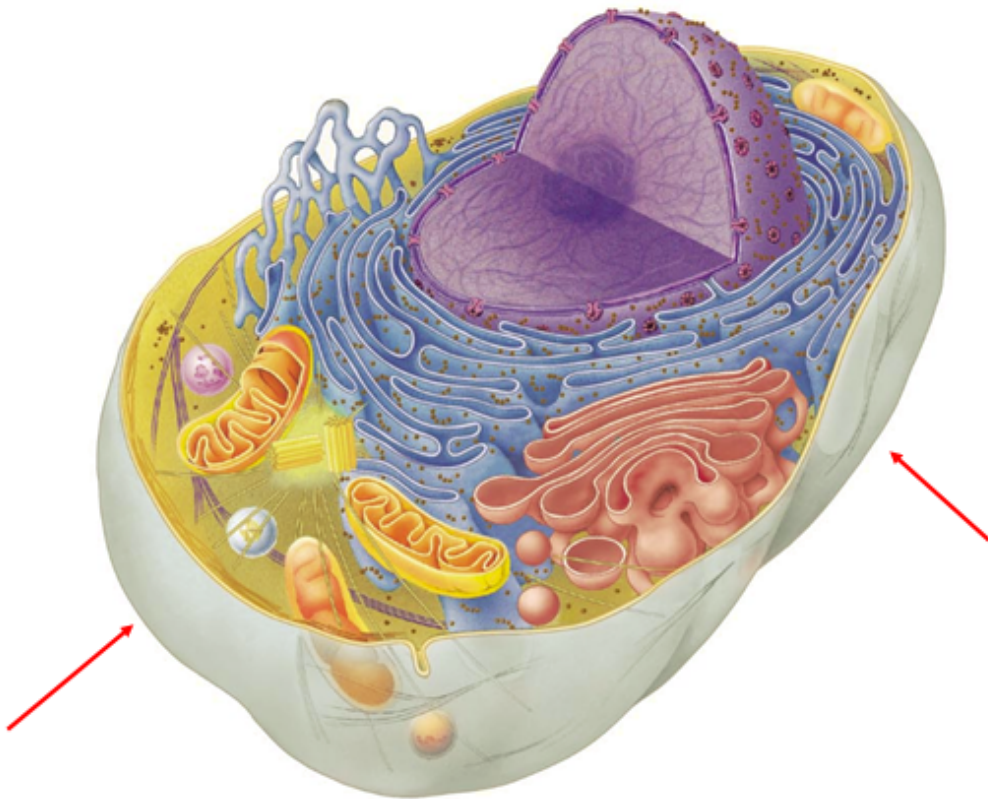


# Comparing a Cell to Santa's Workshop

## Cell Analogy Example



# Comparing a Cell to Santa's Workshop

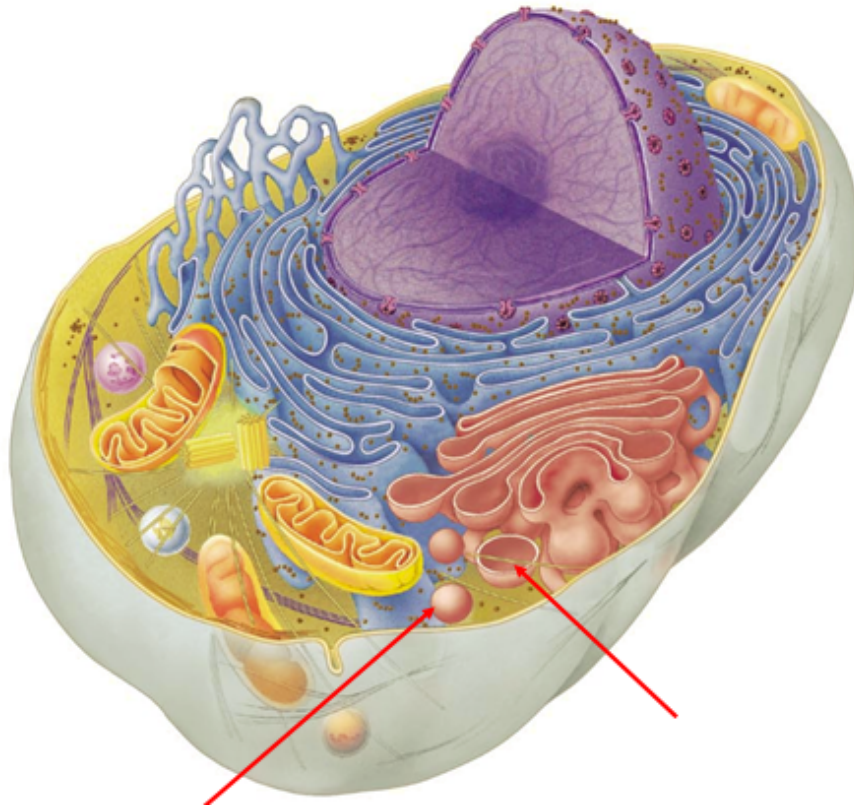


## The Fence is Like the Plasma Membrane

The fence around Santa's Workshop is like the plasma membrane because it protects the workshop by only allowing things in that should be in like happy children (like proteins and nutrients in a cell) and keeping things out that should be out like the abominable snowman (invading viruses and unneeded substances in a cell).



# Comparing a Cell to Santa's Workshop

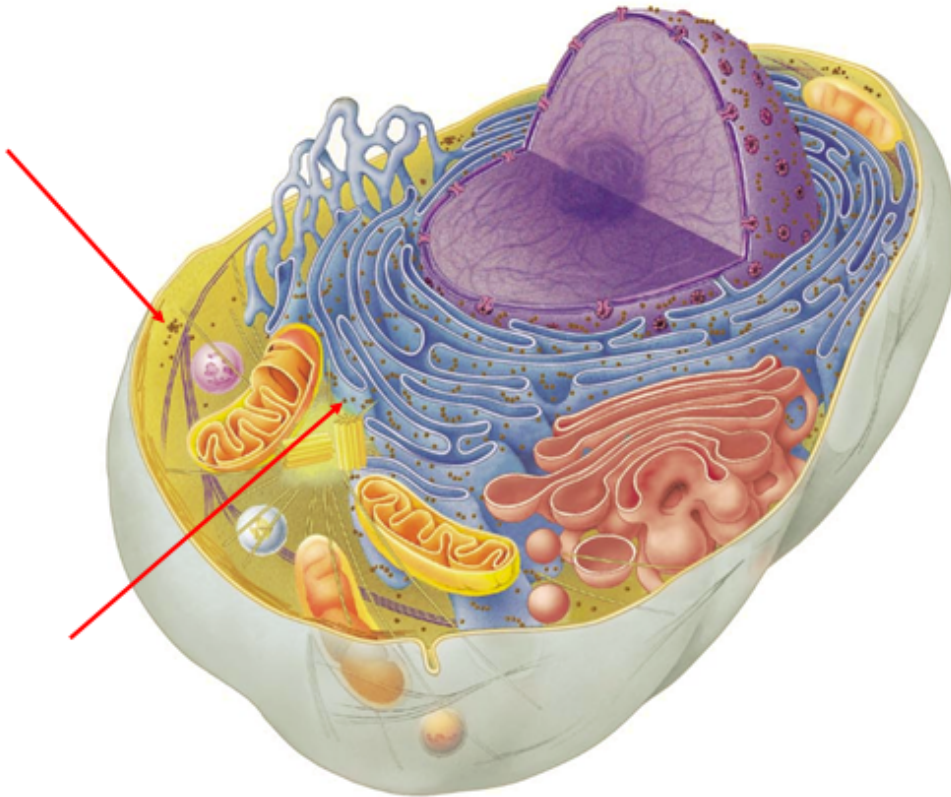


## The Reindeer are Vesicles

**In Santa's Workshop, the reindeer move the product within and out of the workshop just like vesicles move substances within and out of the cell.**



# Comparing a Cell to Santa's Workshop

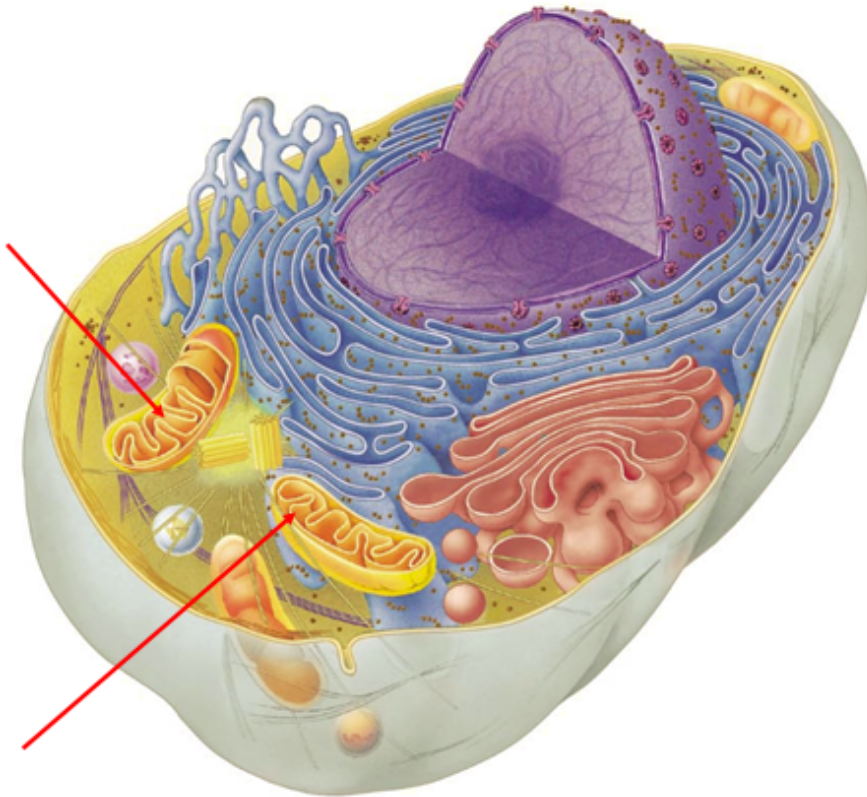


## Santa's Elves are Like Ribosomes

**In Santa's Workshop, the elves make the toys. The toys in the workshop are the proteins in a cell because they are assembled by the elves/ribosomes. In a cell, ribosomes make proteins just like toys are made by elves**



# Comparing a Cell to Santa's Workshop



**Santa's Fireplace is Like Mitochondria**

**In Santa's Workshop, Santa's fireplace burns fuel to produce energy in the form of heat for the workshop just like the mitochondria produces energy for the cell.**

