

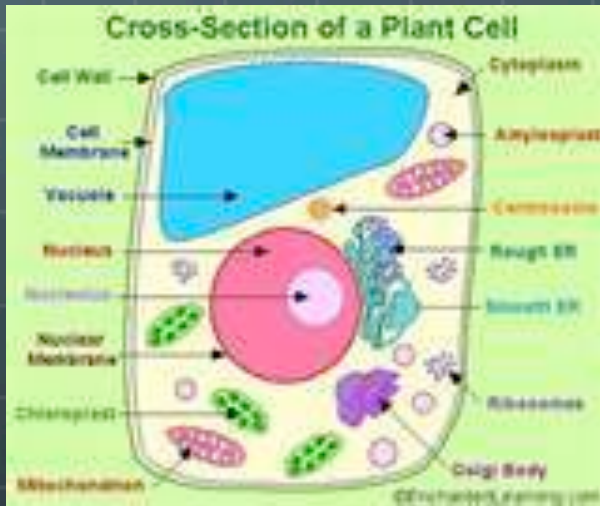
CELLS

Science, Chapter 2

... a Restaurant?

Yes... we are going to compare the activity in a cell to the operation of a restaurant.

Here we go!



CELL MEMBRANE

BOTH – Plant & Animal

Cell:

**Protective layer
that surrounds
the cell**

Restaurant:

**Walls that keep
everything inside**



CELL WALL

Plant Cell Only

Cell:

**Extra strong
outer layer to
protect cell**

Restaurant:

**Bricks on the
outside of the
building**



NUCLEUS

BOTH – Plant & Animal

Cell:

**Directs all activity
and contains DNA
(hereditary material)**

Restaurant:

**Manager, who is
in charge of
everything**



CYTOPLASM

BOTH – Plant & Animal

Cell:

**Gel-like
substance that
fills the cell**

Restaurant:

**The air and the
floor upon which
everything sits**



MITOCHONDRION

BOTH – Plant & Animal

Cell:

**Releases energy
for the cell to use
as needed**



Restaurant:

**Electric company
that supplies
power**



RIBOSOME

BOTH – Plant & Animal

Cell:

**Make proteins
for the cell to use
in everyday
functions**

Restaurant:

**Company that
sells ingredients
for use in
cooking**



ENDOPLASMIC RETICULUM

BOTH – Plant & Animal

Cell:

**Transports
proteins around
the cell**

Restaurant:

**Waiters who
deliver food to
customers**



GOLGI COMPLEX

BOTH – Plant & Animal

Cell:

**Transports items
as needed &
takes items to
membrane for
exit**

Restaurant:

**Waiters &
Busboys who
straighten up and
move things
around**



LYSOSOME

BOTH – Plant & Animal

Cell:

**Breaks down and
recycles waste
materials**

Restaurant:

**Garbage disposal
and recycling
containers**



CHLOROPLAST

Plant Cell Only

Cell:

**Make food for
the cell to use as
energy**

Restaurant:

**Cooks who make
the food for
customers**



VACUOLE

BOTH– Plant & Animal

Cell:

Temporary storage for water, food, waste, etc.

Restaurant:

Refrigerators and shelves that store food & other products

