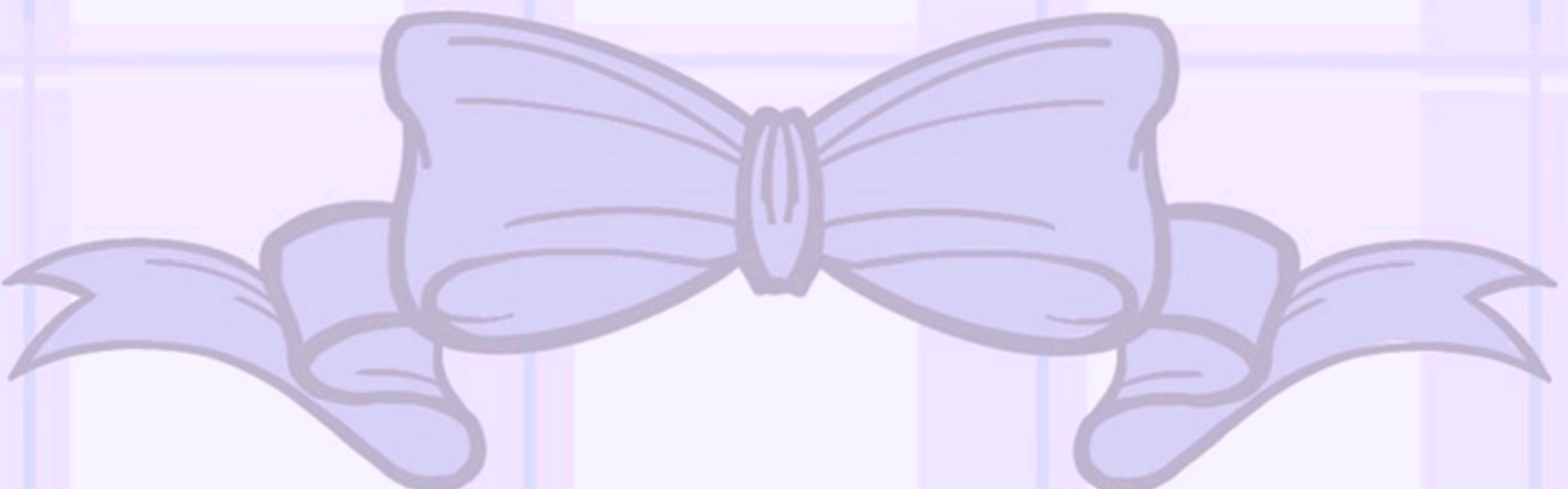


*Sweet*



*Sweet*

# ANIMAL CELLS

## characteristics

- ROD SHAPE OR SPHERICAL
- CONSISTS OF 2 LAYER OF MEMBRANES
  - SMOOTH OUTER MEMBRANE
  - FOLDED INNER MEMBRANE
- CONTAINS ENZYMES (PLAY A ROLE IN CELLULAR RESPIRATION)

- SMALL CYLINDRICAL COMPONENTS (EXIST IN PAIRS IN ANIMAL CELLS)
- MADE UP OF COMPLEX ARRANGEMENT OF MICROTUBULES
- NOT EXIST IN PLANT CELLS

- CONSISTS OF A STAK OF PARALLEL FLATTENED SACS THAT ARE COATED BY A SINGLE CELL MEMBRANE
- NEW MEMBRANE IS ADDED AT ONE END OF THE GOLGI APPARATUS AND VESICLES BUD OFF FROM THE OTHER END

- OUTER MEMBRANE THAT SURROUNDS THE ENTIRE CELL
- MADE OF PROTEINS AND PHOSPHOLIPIDS
- THIN AND ELASTIC FILM
- PARTIALLY PERMEABLE (SEPARATE LAYER)

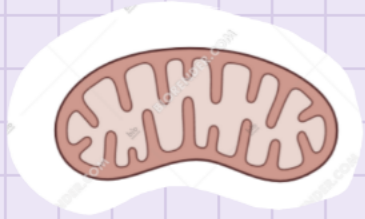
## functions

generates energy through the glucose oxidation process during cellular respiration  
★ energy released in the form of ATP molecules (adenosine triphosphate)

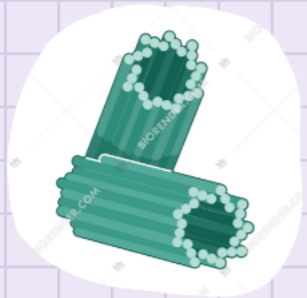
forms spindle fibre during cell division in animal cells

processes, modifies, packs and transports chemicals such as protein, carbohydrate and glycoprotein (combi of protein and carbohydrate)

- ♡ SEPARATES CONTENT OF CELL FROM THE EXTERNAL ENVIRONMENT
- ♡ CONTROLS MOVEMENT OF SUBSTANCES INTO AND OUT OF THE CELL
- ♡ ALLOWS EXCHANGE OF NUTRIENTS, RESPIRATORY GASES AND WASTE MATERIALS BETWEEN CELLS AND SURROUNDINGS



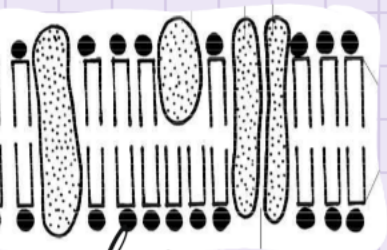
mitochondrion



centriole



golgi apparatus



plasma membrane