

# TYPES OF TRANSPORT

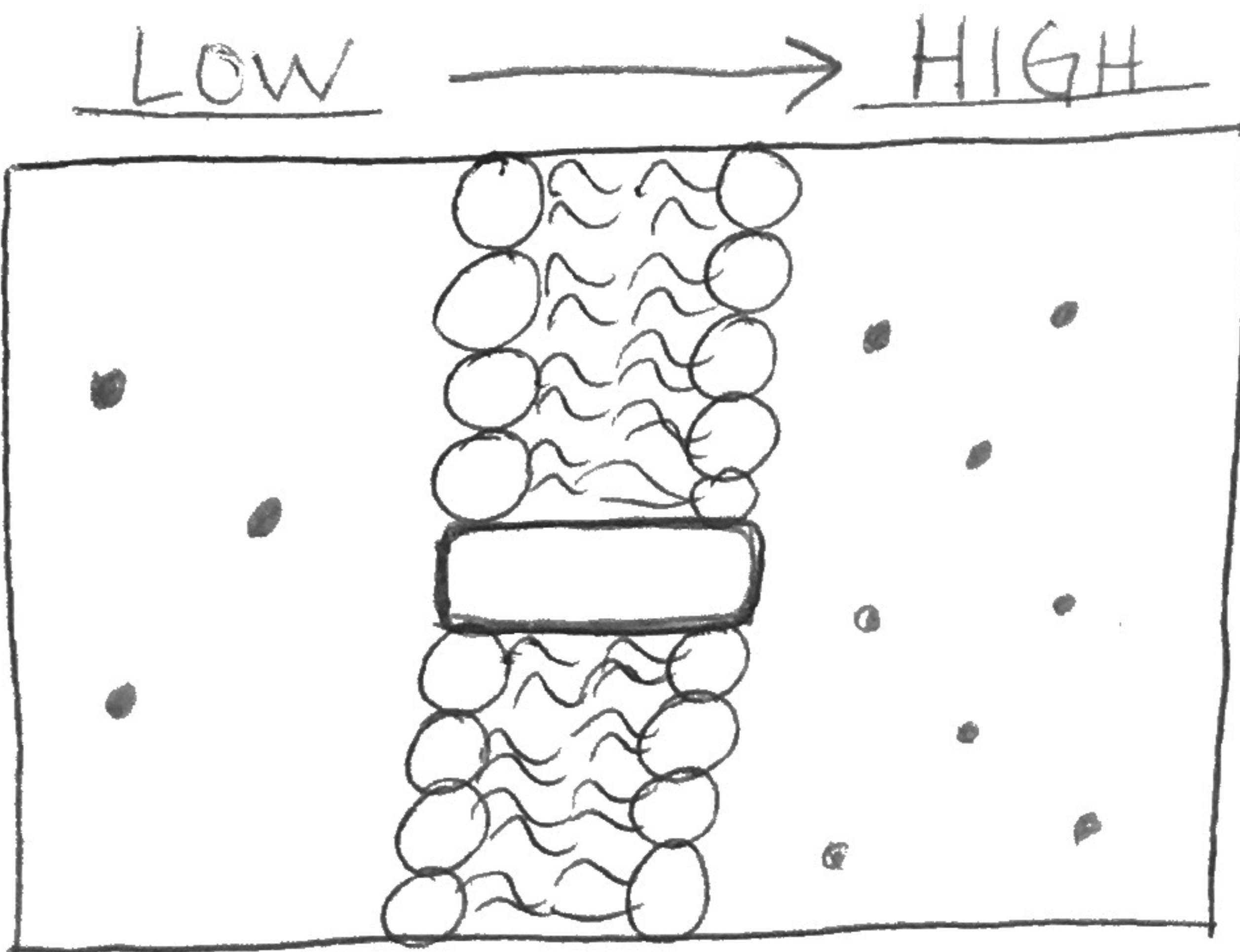
(continued)

## ACTIVE TRANSPORT

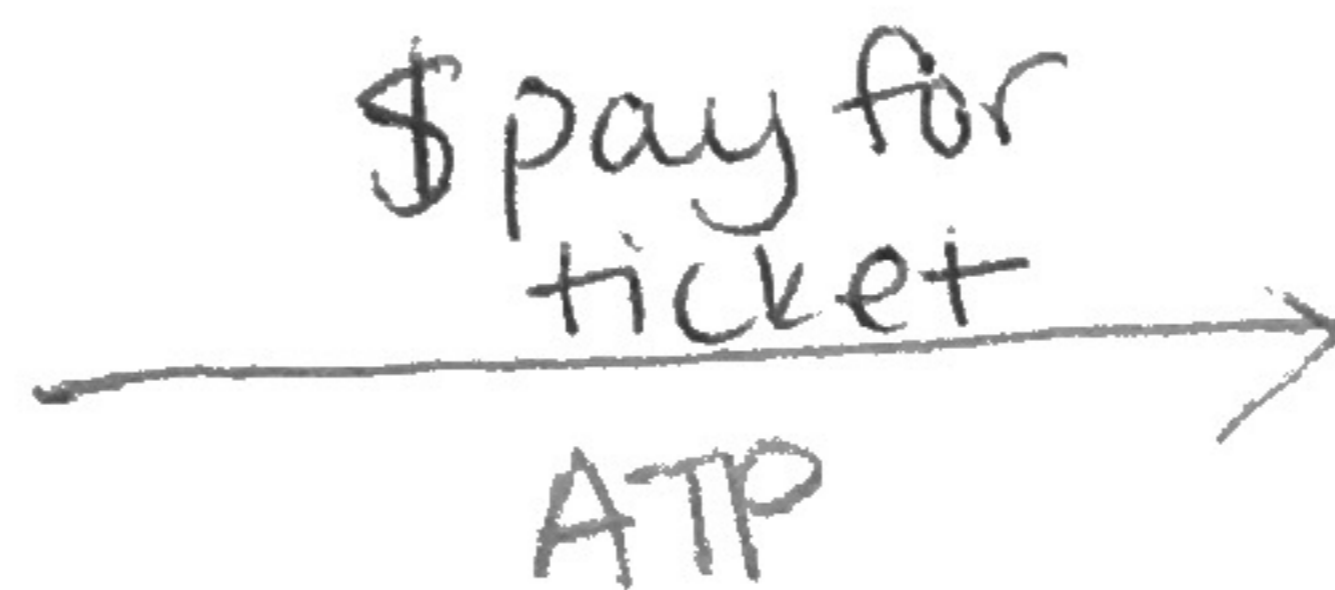
- Require ENERGY! (ATP)
  - must pay \$
- Require transport proteins

\* movement of molecules from a LOW concentration to a HIGH concentration!

\* maintain homeostasis



example:

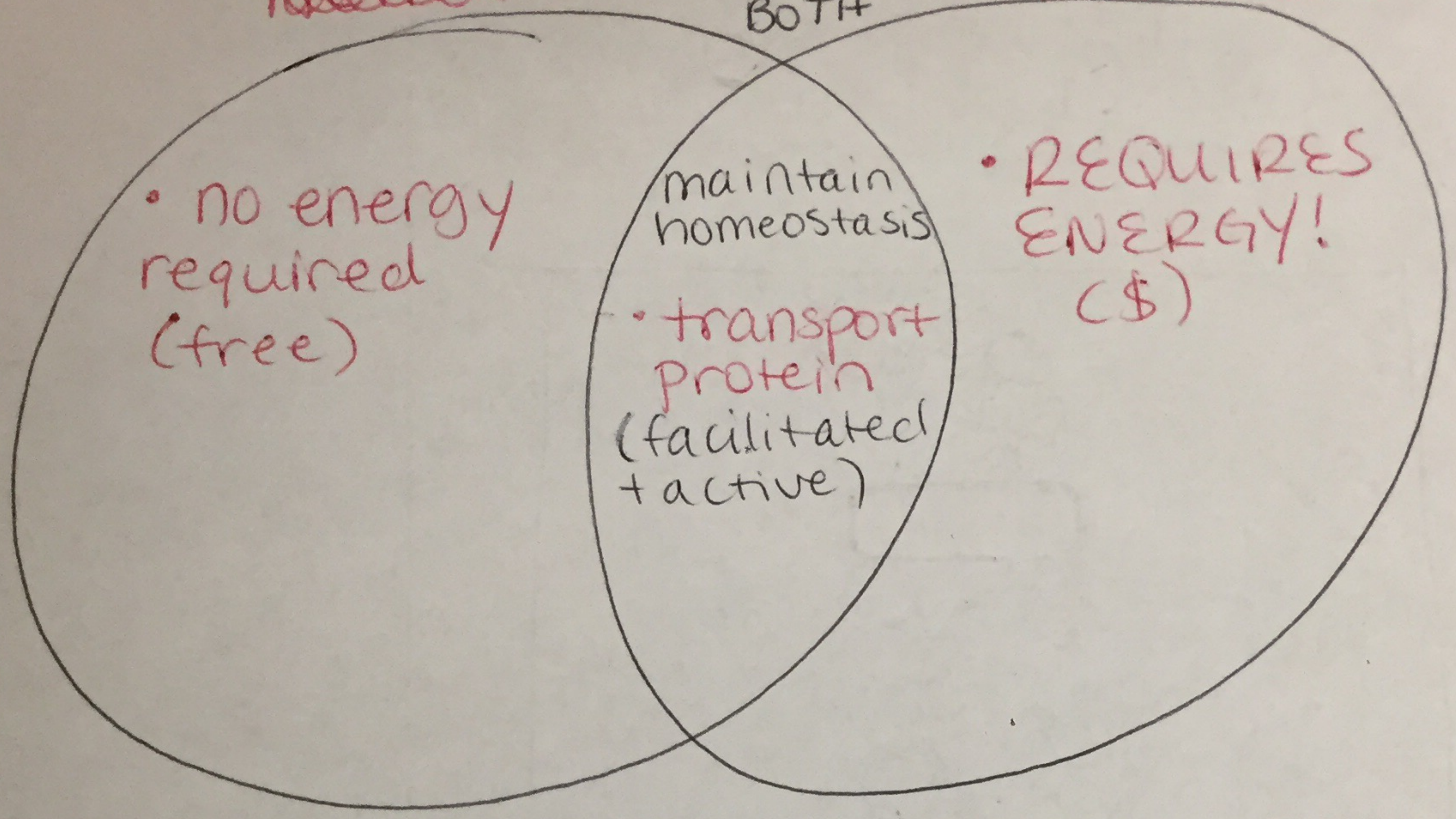


PASSIVE  
~~XXXXXXXXXX~~

ACTIVE  
~~XXXXXXXXXX~~

ON BOARD

BOTH



• no energy required (free)

maintain homeostasis  
• transport protein (facilitated + active)

• REQUIRES ENERGY! (\$)

# TYPES OF TRANSPORT (continued)

Remember Endo and Exo?

↓                      ↓  
in                      exit

- endocytosis
- exocytosis
- phagocytosis

## ① ENDOCYTOSIS

- endo = "take in"
- cyto = "cell"

\* the process of taking IN larger molecules or liquids to form a VESICLE. Fuses with the lysosome where enzymes break down the vesicle membrane and/or its contents.

## ③ PHAGOCYTOSIS

= "cell eating"

- key role in IMMUNE system!
- type of endocytosis (IN)
- use macrophages to fight bacteria + foreign materials.

## ② EXOCYTOSIS

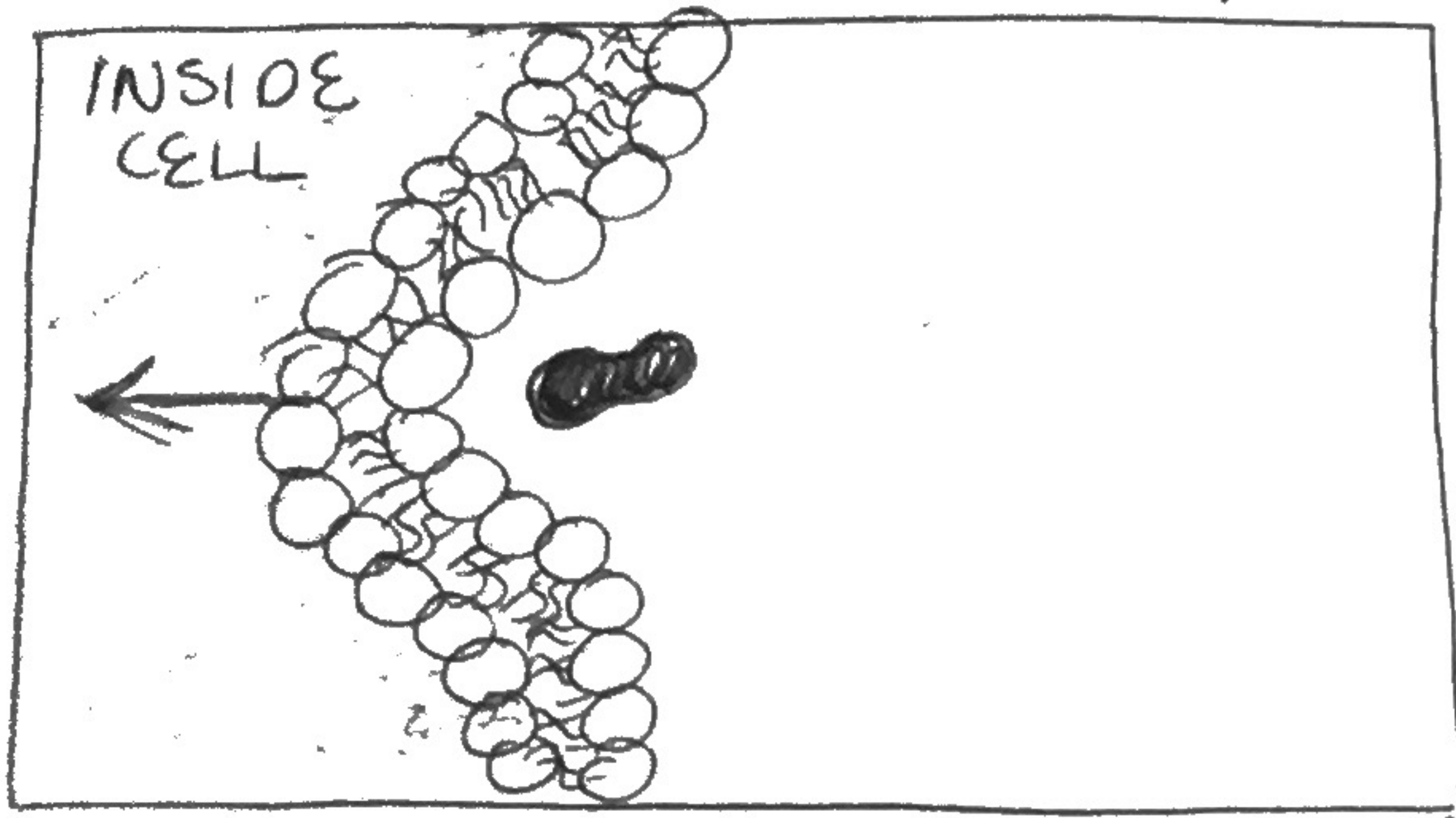
- exo = "exit" or OUT
- cyto = "cell"

\* the process of RELEASING substances out of the cell by the vesicle fusing w/the membrane.

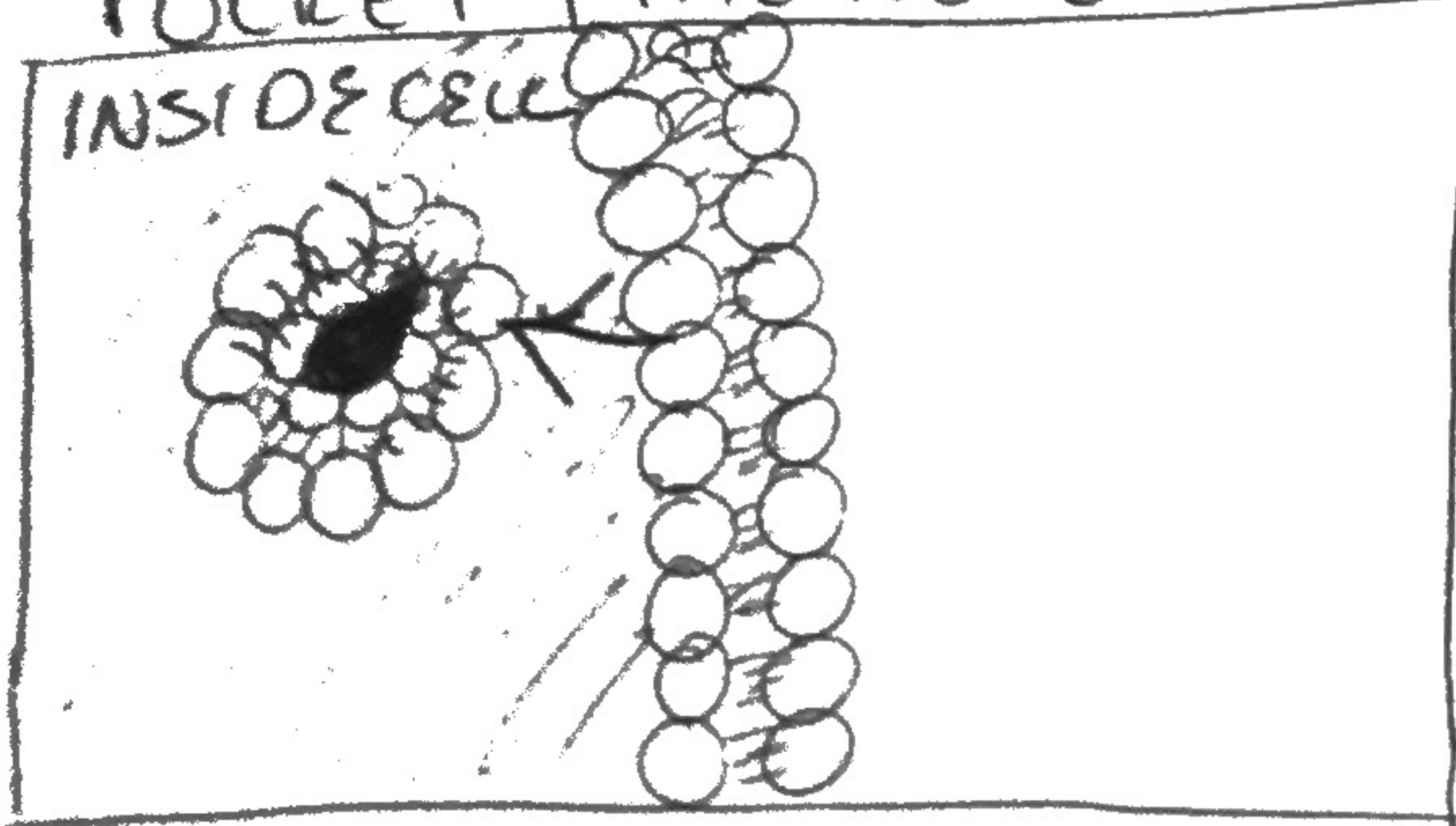
# ENDOCYTOSIS (and Phagocytosis)

see p 90/91

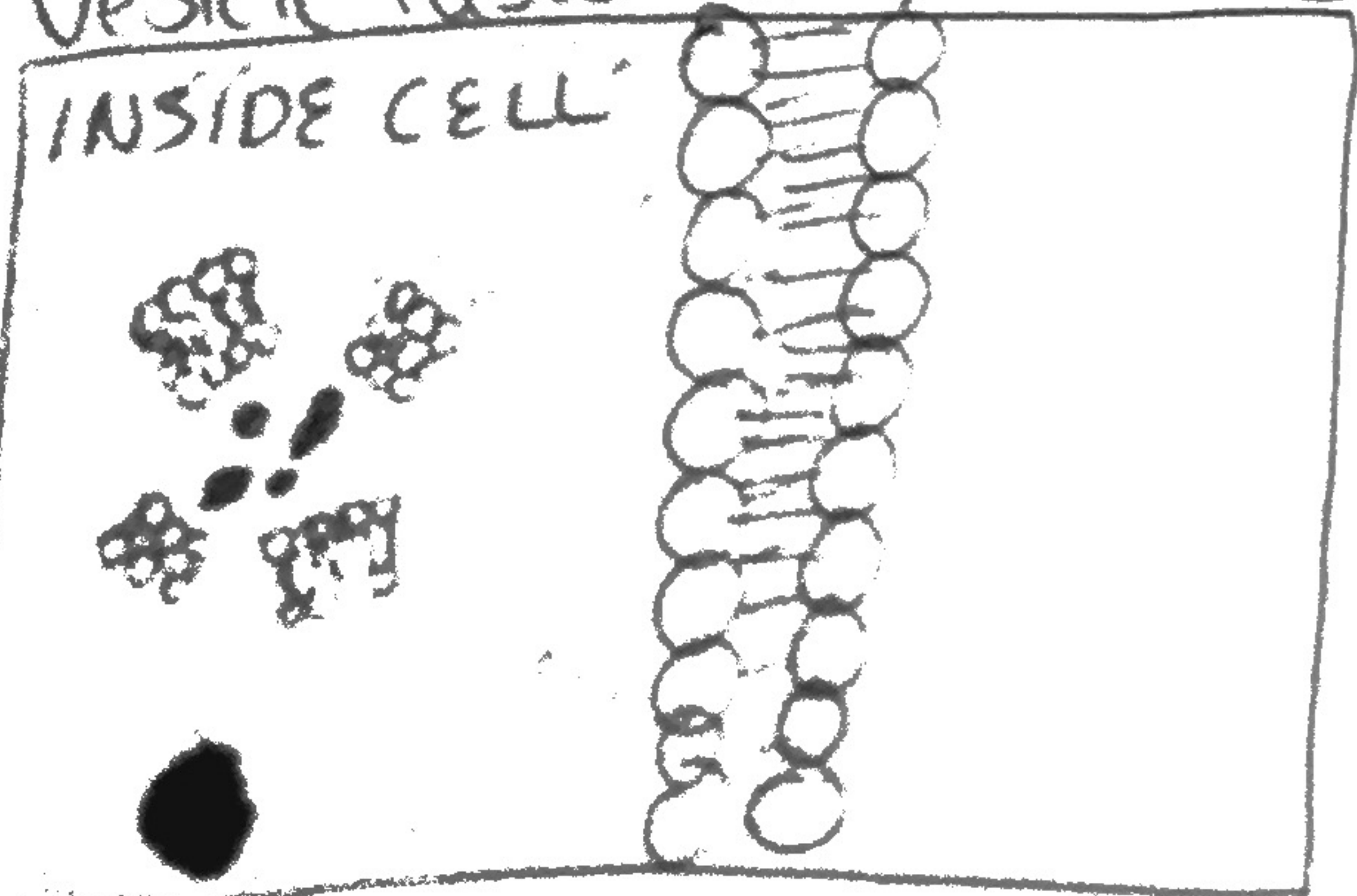
① Membrane makes a pocket



② Pocket pinches off = Vesicle

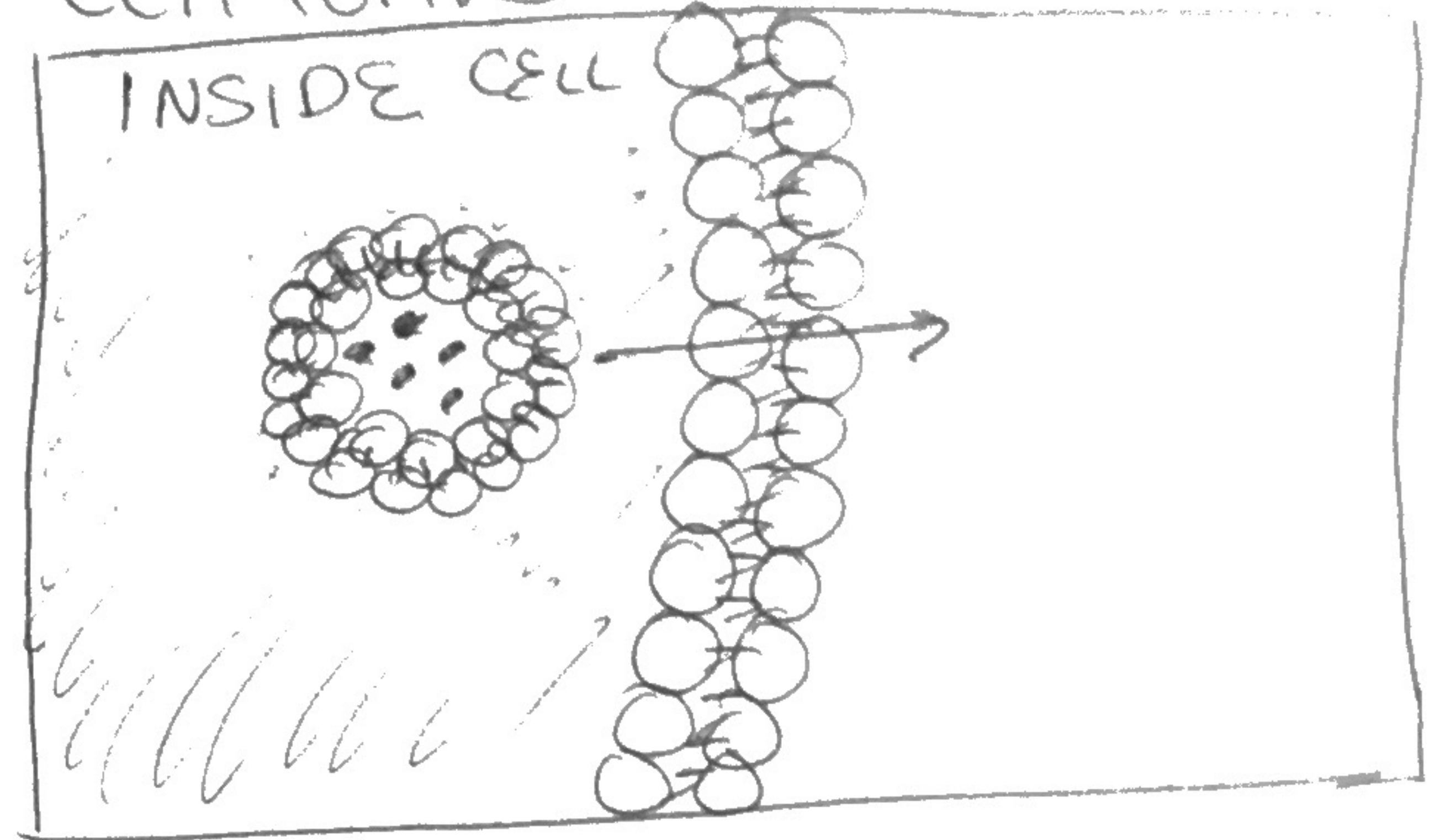


③ Vesicle fuses w/ LYSOSOME

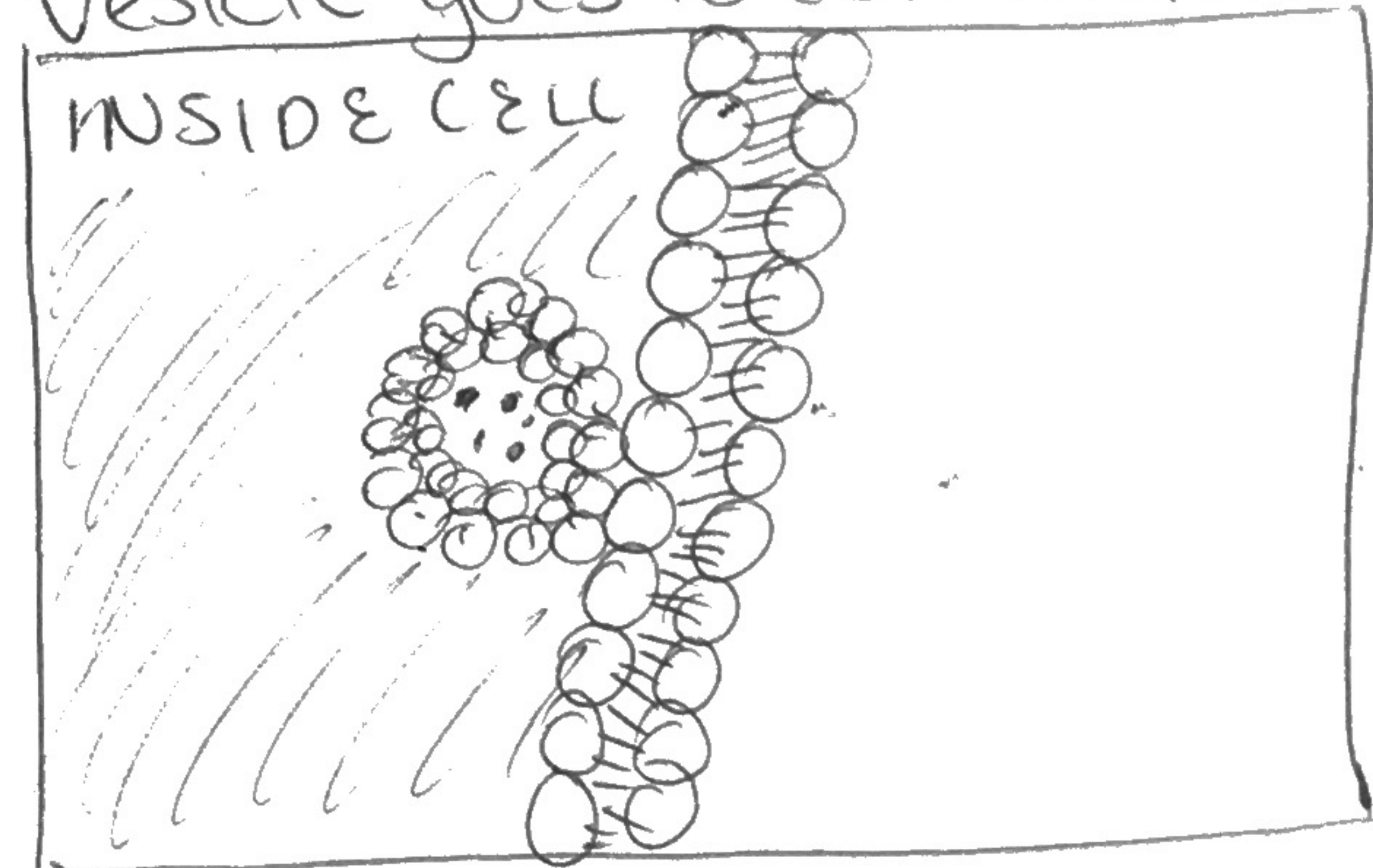


# EXOCYTOSIS

① Cell forms a VESICLE



② Vesicle goes to cell membrane



③ Vesicle fuses w/ membrane & releases contents

