Name:_____   **Date:**   **Period:**

Now that you have learned about every way molecules move across the cell membrane, you know that some ways <u>DON'T use energy/ATP</u> (passive transport) and others <u>DO use energy/ATP</u> (active transport). Using the PowerPoint notes and textbook, you will complete **an animation and explanation of a protein doorway (either open <u>OR</u> closed), endocytosis, or exocytosis**.

For the animation part of this project you will use one of three apps – **Hyperlapse, Stop Motion, OR Explain Everything**.   After creating your animation, you will import your products into iMovie or Explain Everything for the final editing. Check out some examples of animations created with these apps:

Hyperlapse - https://www.youtube.com/watch?v=WYOFdVwvjP4
Stop Motion – https://www.youtube.com/watch?v=aM_GxvjtYXE
Explain Everything – https://www.youtube.com/watch?v=lfu0HZ98neg

Planning out what your animation will look like on paper <u>first</u> will really help you create a great presentation. Create steps in your paper drawings to show what will happen in your animation. Also, it's important to write an explanation about your animation – so make sure that the animation is made first, and <u>then</u> write an explanation about it.**

This project is worth 40 points.

<u>A few requirements:</u>
- This is an animation - so you must show movement of cell structures and particles traveling across the membrane in your video
- In your drawing include a phospholipid bilayer (two layers of heads and tails).
- Make sure you label all structures once, high/ low concentration, inside/outside of the cell, and if ATP is used.
- Make sure you provide details in your explanation and be specific.
- Provide your sources for any info found in the textbook or online

1. Write the explanation for your animation here… (after you draw out your steps)

Type of membrane transport (<u>circle one</u>)

Open protein doorway   Closed protein doorway   Endocytosis   Exocytosis

_____

_____

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2. Plan out your animation of a type of membrane transport below…

App being used _____   Materials _____

Type of membrane transport (<u>circle one</u>)

Open protein doorway   Closed protein doorway   Endocytosis   Exocytosis