

# YEAR 11 BIOLOGY- TERM ONE RECAP WORKSHEET

## SUB- STRAND 1.3

## CELL PROCESSES

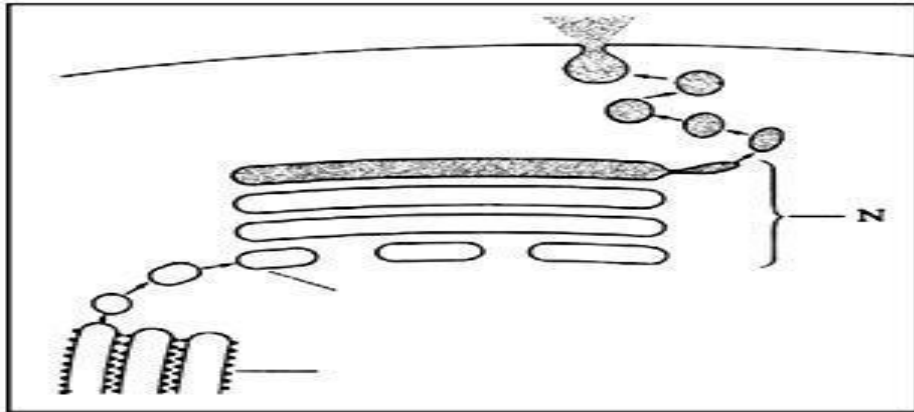
### WORKSHEET 4

#### DAY 1

1. Explain the roles of channel proteins.
2. Explain the roles of carrier proteins.
3. Name two membrane protein.

#### DAY 2

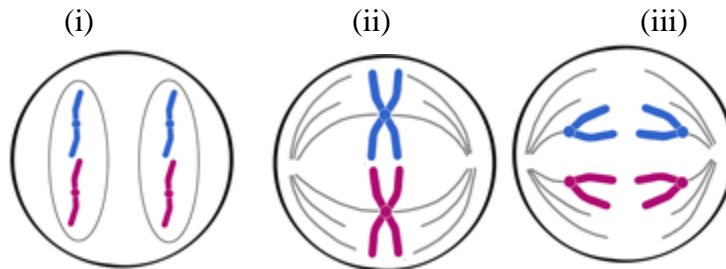
The diagram below shows secretion of mucus, the slimy substance which serves as a lubricant in animals. Use the diagram and your knowledge to answer the questions that follow.



- (i) Name the structure labeled N.
- (ii) State the function of structure labeled N.
- (ii) Name the process shown above.

**DAY 3**

1. Explain why the process of mitosis is important during cell division.
2. Name the following mitotic stage.

**DAY 4**

Study the table below and answer the questions that follow.

| Cube (Model Cell) | Total surface area | Volume            |
|-------------------|--------------------|-------------------|
| A                 | 8 cm <sup>2</sup>  | 1 cm <sup>3</sup> |
| B                 | 24 cm <sup>2</sup> | 8 cm <sup>3</sup> |

- (i) Explain why cube A will have faster diffusion rate than cube B.
- (ii) State one advantage of cells that are smaller in size.
- (iii) Which animal ( Cat and a rat) will lose body heat more quickly? Explain why?

**DAY 5**

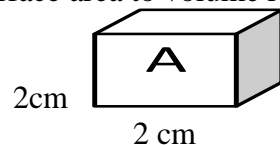
1. Which of the following has the lowest diffusion rate?

A.16:1

B. 24:6

C. 8:1

2. Calculate the surface area to volume ratio of the cube shown below.



3. Calculate the surface area to volume ratio of the cube shown below.

