

Application of membrane transport in physiology

You must create a visual display (Infographic, iMovie, poster, presentation) on the **applications of membrane transport in physiology** (animal, plant, or archaea/fungi). Here are some examples of what topics may be covered. *Note: this is not an exhaustive list - you may come up with your own topic.*

- Na^+/K^+ pump and nerve impulses
- Neurotransmitter propagation
- Ecstasy uptake in the nervous system
- Digestion
- Hormone release
- Cocaine uptake in the nervous system
- Methamphetamines uptake in the nervous system
- Diabetes

You need to include the following in your visual display:

1. How membrane transport is used
2. What “players” are involved
3. What is the result of the transport
4. The impacts on the wider scientific community
(doctors, patients, scientist, etc.)
5. Proper scientific language that was used in this unit
6. At least 3 sources must be used and properly cited
using [MLA formatting](#).

You will be marked on [Criterion D](#). The description of the criterion can be found below.

Criterion D: Reflecting on the impacts of science

Maximum: 8

At the end of year 5, students should be able to:

- i. explain the ways in which science is applied and used to address a specific problem or issue
- ii. discuss and evaluate the various implications of using science and its application to solve a specific problem or issue
- iii. apply scientific language effectively
- iv. document the work of others and sources of information used.

Achievement level	Level descriptor	Task Specific Clarification
0	The student does not reach a standard identified by any of the descriptors below.	You did not reach a standard identified by any of the descriptors below.
1-2	The student is able to: i. outline the ways in which science is used to address a specific problem or issue ii. outline the implications of using science to solve a specific problem or issue, interacting with a factor iii. apply scientific language to communicate understanding but does so with limited success iv. document sources, with limited success .	You were able to: i. outline the ways in which membrane transport is used to address a specific problem or issue ii. outline the implications of using the knowledge of membrane transport to solve a specific problem, interacting with your factor iii. apply scientific language to communicate understanding but does so with limited success iv. document sources, with limited success .
3-4	The student is able to: i. summarize the ways in which science is applied and used to address a specific problem or issue ii. describe the implications of using science and its application to solve a specific problem or issue, interacting with a factor iii. sometimes apply scientific language to communicate understanding iv. sometimes document sources	You were able to: i. summarize the ways in which membrane transport is applied and used to address a specific problem or issue ii. describe the implications of using the membrane transport knowledge and its application to solve a problem, interacting with your factor iii. sometimes apply scientific language to communicate understanding iv. sometimes document sources

Summative Assessment for “Not Without My Golgi” unit - a visual display

	correctly.	correctly.
5-6	The student is able to: i. describe the ways in which science is applied and used to address a specific problem or issue ii. discuss the implications of using science and its application to solve a specific problem or issue, interacting with a factor iii. usually apply scientific language to communicate understanding clearly and precisely iv. usually document sources correctly.	You were able to: i. describe the ways in which membrane transport is applied and used to address a specific problem or issue ii. discuss the implications of using the membrane transport knowledge and its application to solve a problem, interacting with your factor iii. usually apply scientific language to communicate understanding clearly and precisely iv. usually document sources correctly
7-8	The student is able to: i. explain the ways in which science is applied and used to address a specific problem or issue ii. discuss and evaluate the implications of using science and its application to solve a specific problem or issue, interacting with a factor iii. consistently apply scientific language to communicate understanding clearly and precisely iv. document sources completely.	You were able to: i. explain the ways in which membrane transport is applied and used to address a specific problem or issue ii. discuss and evaluate the implications of using the membrane transport knowledge and its application to solve a problem, interacting with your factor iii. consistently apply scientific language to communicate understanding clearly and precisely iv. document sources completely.