Fall 2013

Science in a Bag - Teacher Page

The Mighty Animal Cell

Grade Level

5th

Standards

GLE 0507.1.1 Distinguish between the basic structures and functions of plant and animal cells.

SPI 0507.1.1 Identify the major parts of plant and animal cells such as; the nucleus, cell membrane, cell wall, and cytoplasm.

Task Objective

The students doing this activity will be able to locate the different parts of an animal cell and know what their function is.

Explanation

The students will create a model of an animal cell. They will follow a diagram with information on the main parts of an animal cell. This information will show and tell where the parts are located and their function. This will give the students knowledge of the cell parts and an enlarged visual of the animal cell.

Common Misconceptions

Animal cells have a cell wall.

Vacuoles are only in plant cells.

Real World Connection

The science behind this activity is used by showing an enlarged model of an animal cell. As humans our bodies are filled with these types of cells, that are similar to the model the students will build. The trillions of cells in our bodies is what makes our life possible.

Connections Across the Curriculum

* CCSS.Math.Content.5.MD.A.1 Convert among different sized standard measurement units within a given measurement system (e.g., convert 5cm to 0.05m), and use these conversions in solving multi-step, real world problems.

- To use this standard with The Mighty Animal Cell activity, have the students measure the cell and cell parts in centimeters and convert the measurements to different units.

* CCSS.ELA-Literacy.W5.2 Write informative or explanatory texts to examine a topic and covey ideas and information clearly.

- To use this standard with The Mighty Animal Cell activity, have the students construct a short paper on what they observed and learned from the activity.

* CCSS.ELA-Literacy.SL5.4 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

- To use this standard with The Mighty Animal Cell activity, have the students group

up or stay by themselves and create a short speech to give to the class about the

animal cell and the functions of the cell’s parts.

References

[www.stat.tn.us/education/ci/sci/doc/SCI\_Grade\_5.pdf](http://www.stat.tn.us/education/ci/sci/doc/SCI_Grade_5.pdf)

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