

Passports: Adventures in Learning The Human Body Series: The Immune System Curriculum Guide grades 3-6

Description of our Tour:

Students will join Marcus Snarkis as he travels through the human body and meets the immune system. They will listen as Karen reads poems personifying the systems of the body and then Maria explains how the immune system protects our bodies. Maria explains these systems so that young students can begin to understand the human "machine".

Information for Trip Leader:

Lesson Outcomes:

The student will be introduced to the following concepts:

- The functions of the immune system
- Activities and resources for teachers and students on the immune system

For additional information go to

http://www.21-learn.com/TeamTarget/Passports/human_body/index.htm

and view the tutorials on the immune system and avoiding infection.

Vocabulary Words:

- **Immune System:** The system that protects the body from germs.
- **Germ:** A foreign substance that can cause sickness.
- **Bacteria:** A type of germ that is alive and can reproduce.
- **Virus:** A non-living germ that reproduces by entering the cells of the body.
- **White Blood Cell:** Cell of the immune system that attacks germs.
- **Lymph Nodes:** Part of the immune system that makes white blood cells.
- **Thymus:** Gland of the lymphatic system that makes white blood cells.
- **Antibody:** Molecule made by white blood cells that attacks germs.

Activities:

Activity # 1: Diseases

Assign each student a disease to research. Have students answer the questions listed on the activity page below.

Activity # 2: A Bacterial Cell

Using the textbook, recorded Passport, or the Internet, students label the parts of the bacterial cell. See diagram below.

Challenge Questions:

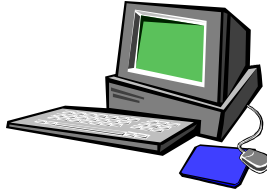
1. *What is the main job of the immune system?*
2. *How can we keep a healthy immune system?*
3. *What are some of the parts of the immune system?*
4. *What would happen if we did not have an immune system?*

Responses:

1. To protect the body from germs/disease.
2. Maintaining healthy habits such as eating and sleeping.
3. White blood cells, lymph nodes, thymus and antibodies.
4. Our bodies could not fight off germs.



Web Resources:



www.howstuffworks.com/immune-system.htm

Information on how the immune system works for upper elementary students.

<http://yucky.discovery.com/flash/body/pg000131.html>

Fun information about the skin and how it protects the body.

<http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=152&id=2402>

Information and activities on the immune systems for elementary students

http://kids.jdrf.org/index.cfm?fuseaction=home.viewpage&page_id=4B312651-5004-D739-A52F211666036011

Fun and interesting information on the immune system for elementary students

Suggested Reading:

The Internal Adventures of Marcus Snarkis: Ray Nelson, Jr., Douglas Kelly, Ben Adams, Julie Hansen

The Incredible Human Body: Esther Weiner

The Human Body (Scienceworks for kids): Elissa Dosik Weinroth, Alexander Cruz, Jo Larsen, and Nancy Schoefl

Writing Prompts:

- The immune system is important because...
- My skin is important because...
- How do I feel when I am sick?
- How do I catch illnesses like a cold?
- How can I protect myself from getting sick?

Activity: Disease

Answer the following questions about the disease you have been assigned.

1. What is the name of the disease?

2. What causes the disease?

3. What are the symptoms?

4. How is the disease passed from person to person?

5. Does the disease have a cure?

Activity: Bacterial Cell

Label the parts of the bacterial cell

