



Pin the Organ on the Body

Curriculum-Linked Education Program Teacher's Kit

This Teacher's Kit offers supplementary materials for the *Pin the Organ on the Body* Education Program. It is designed to be used in your classroom before and after your program booking. We hope it will help you and your students make the most of your visit to the Museum of Health Care.

Please make use of the activities included in this kit as appropriate to your schedule and objectives. If you have any questions about the materials included here or the upcoming visit, please do not hesitate to contact the Museum.

Thank you very much, and we look forward to working with you and your class.

Museum of Health Care at Kingston
Ann Baillie Building
32 George Street
Kingston, ON K7L 2V7
Tel: (613) 548-2419
Email: info@museumofhealthcare.ca
Web Site: www.museumofhealthcare.ca



Table of Contents

Curriculum Links	3
Vocabulary List	5
Pin the Organ on the Body In-Museum Program	6
Post-Museum Visit Activities	7
Self Evaluation and Reflection	9
Teacher Resources	11

Curriculum Links

Science and Technology:

Strand: Understanding Life Systems

Topic: Human Organ Systems

Fundamental Concepts: Systems and Interactions, Structure and Function

Big Ideas: 1) Organ systems are components of a larger system (the body) and, as such, work together and affect one another.
2) Organ structures are linked to their functions.
3) Systems in the human body work together to meet our basic needs.
4) Choices we make affect our organ systems and, in turn, our overall health.

Overall Expectations

C2 Students will investigate the structure and function of the major organs of various human body systems;

C3 Students will demonstrate an understanding of the structure and function of human body systems and interactions within and between systems.

Specific Expectations

C2.4 Use appropriate science and technology vocabulary, including *circulation, respiration, digestion, organs, and nutrients*, in oral and written communication

C3.2 Describe the basic structure and function of major organs in the respiratory, circulatory, and digestive systems

C3.3 Identify relationships between body systems (*e.g., the respiratory system provides oxygen and removes carbon dioxide for the circulatory system*)

Strand: Understanding Structures and Mechanisms

Topic: Structure and Function

Fundamental Concepts: Structure and Function

Big Ideas: Structures and mechanisms throughout our environment have forces that act on and within them.

Specific Expectations

3.1 identify internal forces acting on a structure (*e.g., compression [squeezing], tension [stretching]*), and describe their effects on the structure

Health and Physical Education
Strand: Active Living

Overall Expectations

A3 Demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

Vocabulary List

Vocabulary Word	Definition
Respiratory System	Responsible for the supply of oxygen to the blood, and getting rid of gases that the body does not need
Digestive System	Responsible for breaking down and processing food, and removing it from the human body
Trachea	Also known as the windpipe, the tube by which air travels to reach the lungs.
Lungs	Organs that perform respiration for the body
Stomach	A hollow sac-like organ that aids in the breakdown of food
Spleen	Organ found in the abdomen that helps produce and store blood cells
Liver	Organ that stores vitamins, removes harmful substances from the blood, and helps to break down fats.
Small Intestines	An area in the digestive tract where food is absorbed
Large Intestines	Waste travels through the large intestines through muscle contractions in order to leave the body
Heart	The organ responsible for moving blood around the body

Pin the Organ on the Body In-Museum Program

Description

Participants learn about the location and function of the human body's major organs and are given the opportunity to play the "Pin the Organ on the Body" Game. Organs discussed include the brain, heart, lungs, spleen, liver, intestines, and stomach.

Educational Outcome

At the end of the visit, participants will be able to:

- ❖ Explain the function of the human body's major organs and identify which system they belong to
- ❖ Understand the location of the major organs within the body

Length

- ❖ Approximately 30-35 minutes

Potential Audiences

- ❖ This activity could be used with school groups, summer camp groups or families
- ❖ This activity is appropriate for children ages 6-12

Post-Museum Visit Activities

Matching Challenge!

Match up the organ to its function!

- | | |
|--|---------------------|
| ___ 1. Removes old red blood cells | A. Heart |
| ___ 2. The body's "control centre" | B. Trachea |
| ___ 3. Bony tube that connects the mouth to the lungs | C. Stomach |
| ___ 4. Receives blood from the lungs and pumps it to the body | D. Lungs |
| ___ 5. Breaks down food into smaller particles | E. Spleen |
| ___ 6. The passageway that waste travels when leaving the body | F. Brain |
| ___ 7. An organ that brings oxygen into the body | G. Intestine |

Answer Key:

1. E, 2. F, 3. B, 4. A, 5. C, 6. G, 7. D

Post-Visit Potential Assignments

- a) Select an organ and create a poster advertising the organ and its special functions.
- b) Break class into teams of three or four. Each team must present a report to the class about the structure and function of a different organ system. Encourage students to present their information in a creative way! Perhaps in a skit, short film, or song form.
- c) Work together as a class or in small groups to simulate all the steps in one of the human body systems.
- d) Design a labelled model showing how an organ or a human organ system functions. This can be completed as a simple diagram using construction paper, or a 3D model.

A video tutorial demonstrating how to construct a simple 3D model of a lung can be viewed at this link:

http://sciencesquad.questacon.edu.au/activities/model_lung.html

Self Evaluation and Reflection

Name: _____

Learning Skills

N - needs improvement S - satisfactory work G - good work E - excellent work

Independent Work

- | | | | | |
|--|---|---|---|---|
| <input type="checkbox"/> worked well without supervision | N | S | G | E |
| <input type="checkbox"/> followed rules and instructions independently | N | S | G | E |

Initiative

- | | | | | |
|---|---|---|---|---|
| <input type="checkbox"/> responded to a new situation or challenge | N | S | G | E |
| <input type="checkbox"/> showed interest in the activity and a willingness to learn | N | S | G | E |

Use of Information

- | | | | | |
|--|---|---|---|---|
| <input type="checkbox"/> asked questions to clarify meaning and ensure understanding | N | S | G | E |
|--|---|---|---|---|

Cooperation

- | | | | | |
|--|---|---|---|---|
| <input type="checkbox"/> showed positive relationships with other students | N | S | G | E |
| <input type="checkbox"/> helped others | N | S | G | E |
| <input type="checkbox"/> shared in cleaning duties after an activity | N | S | G | E |

Conflict Resolution

- | | | | | |
|---|---|---|---|---|
| <input type="checkbox"/> resolved conflicts in socially accepted ways | N | S | G | E |
| <input type="checkbox"/> assisted others to resolve conflicts appropriately | N | S | G | E |

Class Participation

- | | | | | |
|---|---|---|---|---|
| <input type="checkbox"/> willingly worked with a new grouping | N | S | G | E |
| <input type="checkbox"/> took responsibility for my share of the work | N | S | G | E |
| <input type="checkbox"/> encouraged others to participate | N | S | G | E |

Problem Solving

- | | | | | |
|--|---|---|---|---|
| <input type="checkbox"/> applied successful strategies to new problem situations | N | S | G | E |
|--|---|---|---|---|

<p>What I did best during this activity</p>	<p>What I need to improve on and how I will achieve that goal</p>
<p>What I liked best about the activity and why I liked it</p>	<p>What I would change about the activity if given the opportunity</p>
<p>Something new I learned</p>	<p>What I would like to learn more about</p>

Teacher Resources

Human Body and Mind

<http://www.bbc.co.uk/science/humanbody/body/>

Online games about the human body.

The Lung Association: Inside the Human Body- The Respiratory System

http://www.lung.ca/children/grades4_6/index.html

Information about lung health and air pollution.

Model of a Human Lung

<https://www.questacon.edu.au/outreach/programs/science-circus/videos/model-of-lung>

Instructions for making a simple model of the human lung.

The Inner Body

<http://www.innerbody.com/image/digeov.html>

Interactive 2D and 3D models of the human digestive system.