

- The MORE HEALTH website is equipped with a classroom Teacher section. Here you will find pre- and post-visit activities, vocabulary words, and in many cases preand post-visit videos.
- Visit morehealthinc.org <u>https://www.morehealthinc.org/teachers/</u>
- Password: resources

Pre-Visit Activities

- Review the enclosed vocabulary. Students should have a working knowledge of the terms prior to our visit.
- Click the link to play videos: Journey of the Heart (7:01) <u>https://www.youtube.com/watch?v=B5kMgmK0bnw</u> Know the Facts: Organ and Tissue Donation (2:20) <u>https://www.youtube.com/watch?v=Qh1RsTgk7mE</u>
 Afterwards, discuss "why nearly may on may not shoese to become an organ denor."

Afterwards, discuss "why people may or may not choose to become an organ donor."

Suggested Post-Visit Activities

- As a class, discuss with your students what they think about the information presented. What were their previous views about organ and blood donation? What information affected them the most? Have they had any prior experience with organ or blood donation? Do they anticipate having any future involvement with organ/blood donation? (e.g., drivers license organ designation, blood donation)
- Go over the Organ Donation Letter of Intent (handout) and encourage students to use this as a tool for facilitating a discussion with their parents on their wishes for donation.
- For a comprehensive review of the lesson material Click the link to play video: Organ Donation and Transplantation: How Does it Work? (4:57) <u>https://www.youtube.com/watch?v=K4bS7YZjqhY</u>
- Have students write a paper advocating for organ or blood donation using the above referenced videos and/or these additional websites: bethematch.com, donatelifeflorida.org, or unos.org (United Network for Organ Sharing).
- Use the **Organ** worksheet as an additional teaching tool. Answer key provided (page 6).





Vocabulary

| • | abusen | the improper use of something |
|---|--|--|
| • | blood _n | a fluid that circulates oxygen and nutrients in the body and helps remove carbon dioxide from the cells |
| • | blood $bank_n$ | a place where blood and blood products are collected and stored for future use or transfusion |
| • | blood donor _n | a person who volunteers to share some of their blood to save someone's life |
| • | bone marrow _n soft spongey tissue that fills the cavities of the bones, manufacture marrow stem cells and other substances, which in turn produce \mathbb{R}^{n} | |
| • | blood transfusion _n | process of transferring the blood of a person into the veins of another |
| • | brain death $_{\rm n}$ | death resulting from total, irreversible cessation of all brain functions, including the brain stem |
| • | cardiac death $_{n}$ | death resulting from total, irreversible cessation of heartbeat and respiration |
| • | cornea _n | the eye's clear, outer protective layer of tissue covering the iris and pupil |
| • | dialysis _n | a treatment that removes wastes and extra fluid from your blood when your kidneys stop working properly |
| • | diseasen | a particular abnormal condition that negatively affects the structure or part of an organism that is not due to any immediate external injury |
| • | immunosuppressant _n | a drug that suppresses the immune response of an individual |
| • | living related donor _n | an individual in good health who has undergone compatibility testing and can donate a kidney or a portion of a liver or lung to a relative |
| • | organn | a self-contained body part that performs a specific function |
| • | organ _n rejection | a process in which a transplant recipient's immune system attacks the transplanted organ or tissue |

• **regeneration**_n the process of an organism regrowing a lost part so original function is restored



Lesson Sponsors





y

©MORE HEALTH, Inc.

Visit us on our website: <u>www.morehealthinc.org</u> and follow us on



- **tissue**_n a group of similar cells that act together to perform a function in the body
- toxin_n a harmful poison, produced withing living cells and organisms
- **transplantation**_n surgical placement of a donated organ or tissue from a donor to a recipient
- **trauma**_n bodily wound, injury, or shock.
- United Network for Organ Sharing (UNOS)_n
 a non-profit organization that serves as the nation's Organ Procurement and Transplantation Network (OPTN) and monitors the national waiting list for equitable sharing of organs
- vital_{adj} absolutely necessary or important, essential

©MORE HEALTH, Inc.

oneblood Share your power.



Lesson Sponsors



Visit us on our website: www.morehealthinc.org and follow us on



Goals

- Students will understand basic organ anatomy, function, and transplantation.
- Students will understand that heredity, disease, and abuse can lead to organ failures.

Objectives

- Students will be able to describe the damage disease can cause to organs.
- Students will be able to describe the damaging effects inhalants, alcohol, cigarettes, and unprotected sex have on their bodies.
- Students will be able to identify four organs that can be transplanted and their functions.
- Students will be able to identify two tissues that can be transplanted and their functions.
- Students will understand how and when they could be eligible to donate their blood, bone marrow, or stem cells to help save lives.
- Students will be able to describe the three types of donors and the matching process.

<u>Standards</u>

| The student will | | | | | | | |
|------------------|---|--|--|--|--|--|--|
| HE.912.B.5.1 | determine the value of applying a thoughtful decision-making process in | | | | | | |
| | health-related situations. | | | | | | |
| HE.912.B.5.3 | appraise the potential short-term and long-term outcomes of each | | | | | | |
| | alternative on self and others. | | | | | | |
| HE.912.B.6.1 | evaluate personal health practices and overall health status to include all | | | | | | |
| | dimensions of health. | | | | | | |
| HE.912.B.6.4 | formulate an effective long-term personal health plan. | | | | | | |
| HE.912.C.1.1 | predict how healthy behaviors can affect health status. | | | | | | |
| HE.912.C.1.5 | assess the degree of susceptibility to injury, illness or death if engaging in | | | | | | |
| | unhealthy/risky behaviors. | | | | | | |
| HE.912.C.1.7 | analyze how heredity and family history can impact personal health. | | | | | | |
| HE.912.C.1.8 | assess the degree of susceptibility to injury, illness, or death if engaging in | | | | | | |
| | unhealthy/risky behaviors. | | | | | | |
| HE.912.P.7.1 | analyze the role of individual responsibility in enhancing health. | | | | | | |
| HE.912.P.7.2 | evaluate healthy practices and behaviors that will maintain or improve | | | | | | |
| | health and reduce health risks. | | | | | | |
| HE.912.SUA.1.10 | analyze the short- and long-term physical, psychological, financial, and | | | | | | |
| | social consequences of tobacco and/or nicotine use. | | | | | | |
| | | | | | | | |

©MORE HEALTH, Inc.





Lesson Sponsors



Visit us on our website: www.morehealthinc.org and follow us on



| HE.912.SUA.1.3 | analyze the long-term health risks associated with alcohol misuse including liver disease, cancer, cardiovascular disease and neurological damage. |
|-----------------|--|
| SC.912.L.14.34 | describe the composition and physiology of blood, including that of the plasma and the formed elements. |
| ELA.912.V.1.1 | integrate academic vocabulary appropriate to grade level in speaking and writing. |
| LAFS.910.SL.1.1 | initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. (<i>suggested post-visit activity</i>) |
| LAFS.910.SL.1.3 | evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence. |
| LAFS.910.SL.2.4 | preset information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task. (<i>suggested post-visit activity</i>) |
| LAFS.910.W.1.1 | write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. (suggested post-visit activity) |
| LAFS.910.W.1.2 | write informative/explanatory texts to examine and convey complex ideas concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. (<i>suggested post-visit activity</i>) |
| LAFS.910.W.2.4 | produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (suggested post-visit activity) |



Lesson Sponsors

©MORE HEALTH, Inc.

LifeLink®



Visit us on our website: <u>www.morehealthinc.org</u> and follow us on



"LIVE LIFE, GIVE LIFE!"

| 1. | Reasons things can | n go wrong with our organs | and/or blood? a | Genetics | | | | |
|--|---|---------------------------------------|-------------------------------|--------------------------|--|--|--|--|
| | | trauma | | | | | | |
| 2. | . List three examples of external trauma: a. Car Accident b. Gunshot | | | | | | | |
| | c. <u>Sports Injury</u> | | | | | | | |
| 3. List three substances that can cause internal trauma: a. <u>Alcohol</u> | | | | | | | | |
| | b. <u>Tobacco</u> | c. Drugs | | | | | | |
| 4. | 4. List six vital organs and tissues: a. Brain b. Lungs | | | | | | | |
| | c. <u>Heart</u> | d. <u>Liver</u> | | | | | | |
| | e. Kidneys | f. Blood | | | | | | |
| 5. | A Hematoma | is a soli | d swelling of clotte | d blood outside of blood | | | | |
| | vessels within the | tissues. | | | | | | |
| 6. | Your brain fully develops around the age of <u>25</u> . | | | | | | | |
| 7. | We take approximately 20,000 breaths a day! | | | | | | | |
| 8. | The Liver | job is to filter the b | olood, store nutrients | s and serve as the | | | | |
| body's chemical manufacturing plant. | | | | | | | | |
| 9. | According to the Liver Foundation, <u>Obesity</u> is a leading cause of liver disease. | | | | | | | |
| 10. | The liver is the on | ly internal organ that can <u>I</u> | <u>Regenerate</u> , mea | ning it can grow back. | | | | |
| 11. | | only one of these, so a perso | on can donate one of | these while still alive: | | | | |
| | Kidney | <u> </u> | | | | | | |
| 12. | Blood | is classified as a tis | ssue and is vital to o | ur survival. | | | | |
| 13. | 3. The <u>Chinese</u> first attempted an unsuccessful transplant in <u>400</u> BC. | | | | | | | |
| 14. | Medicines called | Immunosuppressants | were dev | veloped in the 1960s and | | | | |
| | | s ability to reject a transplar | | | | | | |
| 15. | A healthy person i | needs to be at least <u>16</u> year | rs of age, and weigh | at least 110 | | | | |
| | pounds to donate b | olood. | | | | | | |
| 16. | •1 0 | an and tissue donors include | | | | | | |
| | b. Cardiac D | c. I | Brain Dead | | | | | |
| Organ and Blood Donors | | | | | | | | |
| SAVE Lives! | | | | | | | | |
| | | | | | | | | |
| | | Lesson S | ponsors | ©MORE HEALTH, Inc. | | | | |
| | | | polisors | | | | | |
| | 0 | TCLL | Tampa | LifeLink® | | | | |
| | •• | UGH | Tampa General Hospital。 | | | | | |
| oneblood Hospital. | | | | | | | | |
| | Share your power. | · · · · · · · · · · · · · · · · · · · | 1.6.11 | f | | | | |
| | Visit us on our website: <u>www.morehealthinc.org</u> and follow us on it is the set of the | | | | | | | |