HUMAN BODY UNIT

Required Resources

*Easy Make and Learn Projects: Human Body
*Blood and Guts

Optional Resource

*Evan Moor Giant Science Resource Book
*Understanding Your Muscles and Bones (Usborne) *or find another book on this topic at your library
*Understanding Your Senses (Usborne) *or get another book about your senses from the library
*Healthy Eating and Exercise by Claire Llewellyn (ANY book on healthy diet/exercise may be substituted)

Day 1
The Body Book from *Easy Make and Learn – Human Body* page 9-1
Magnified Mysteries from *Easy Make and Learn – Human Body* page 16-17
Read from *Blood and Guts* p. 11-15
Minit book- Skin layers
Map the Back of Your Hand p. 16 of *Blood and Guts* (put in pocket)

Day 2
Cells from page 13 of *Easy Make and Learn – Human Body*
Read from *Blood and Guts* p. 17-19
Minit books-Purpose of Hair
Complete Hairy Facts (from page 20 of Blood and Guts)
Skin and Hair from *Easy Make and Learn – Human Body* page 43-46

Day 3
Study the Skeletal System picture from *Evan-Moor’s Giant Science Resource Book* p 120
Make the skeleton from the Giant Resource book p. 141-143
Read from *Blood and Guts* p. 22-24
Do “Where Are My Bones?” From *Easy Make and Learn – Human Body* p. 51
Minit Books- No Bones About It (facts), Types of Bones
Do experiment on page 27 of *Blood and Guts*
Page 54 of *Easy Make and Learn – Human Body*
Look at links in *Understanding Your Muscles and Bones* book p. 9 and p. 27

Day 4
Study the Muscular System *Evan-Moor’s Giant Science Resource Book* book p. 121
Read from *Blood and Guts* p. 37-38, 42
Build a model arm on page 39 of *Blood and Guts*
Do experiment on page 48 of *Blood and Guts*
Day 5  
Look at the Circulation Wheel from pg. 70-71 of *Easy Make and Learn – Human Body*

Look at this Human Blood worksheet:  

Make a candy model of blood from that worksheet

Read pg. 49-51, 58 in *Blood and Guts*

Minit books: Double Barreled Pumper, Heart facts

Do experiment on page 57 of *Blood and Guts* (use minit book to record)

Minit book: Stress test

Look at the web link from pg. 14-15 of *Understanding your Muscles and Bones* book

Day 6  
Read pg. 59-61, 64 of *Blood and Guts*

Make the “chest vest” from *Easy Make and Learn – Human Body* p. 63-67

Make “Breathe In, Breathe Out” from p. 60 of *Easy Make and Learn – Human Body*

Minit books: How Big are Your Lungs?, Amazing Facts

Read pg. 66, 68 of *Blood and Guts*

Minit book: Vocal Cords

Day 7  
Read page 114, 116 of *Blood and Guts*

Do the experiments on page 117 and page 121

Do “How the Body Works” (the brain worksheet) from  
http://kidshealth.org/PageManager.jsp?lic=1&article_set=54391&cat_id+20607

Minit book: Mission Control

Make a brain hat from http://www.ellenjmchenry.com/id97.html

Day 8  
Read page 90 from *Blood and Guts*

Do observation from page 91 of *Blood and Guts*

Do experiment on page 89 of *Blood and Guts*

Do experiment on page 95 of *Blood and Guts*

Read through information on  
http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true& &ERICExtSearch_SearchValue_0=ED445918&ERICExtSearch_SearchType_0=no&accno=ED445918

Make matchbooks about the eye problems

Minit book: Eye Facts

Read through Usborne’s Understanding Your Senses p. 6-9 (link on p. 9)

Make the “sliding eye” from *Easy Make and Learn – Human Body* p. 25-26

Label the eye from  
Day 9
Read pg 97-98 from Blood and Guts
Do the experiment on page 99 of Blood and Guts
Make the “ear accordion” from p. 30 of Easy Make and Learn – Human Body
Minit book: Can you hear me now?
From Usborne’s Understanding Your Senses p. 10-12 (link on p. 11)

Day 10
Read pg 76 – 79 in Blood and Guts
Study the picture from http://www.doverpublications.com/zb/samples/468216/children1b.htm
Make the digestion poster from Easy Make and Learn p. 74-77
Minit book: Digestion

Day 11
Make the 3D food pyramid from http://www.ellenjmchery.com/id137.html
Read p. 33-34, 36 from Blood and Guts
Minit book: Teeth
Read Healthy Eating and Exercise by Claire Llewellyn
Taste Buds from Easy Make and Learn p. 33
Understanding your Senses read p. 14-15 (do the experiment in the link)
Cut out rectangle as one piece. Fold on solid lines. You should have a book that opens like the “shutters” on a window. Fold book in half on dotted line.
Use with page 49 of Blood and Guts by Linda Allison
Babies have very poor vision at birth. They learn to see the same way they learn to talk—both habits and muscles must be developed.

Your eyes sometimes look red in a photograph because light from the flash reflects off the choroid, blood vessels that nourish the retina.

A person blinks once every five seconds. That means most people’s eyes are shut for nearly 30 minutes while they are awake each day.

Each of your eyes weighs $\frac{1}{4}$ ounce, measures less than one inch in diameter, and is shaped like a slightly flattened ball.

Under good conditions the human eye can distinguish 10 million color surfaces.
<table>
<thead>
<tr>
<th></th>
<th>Lying Down</th>
<th>Sitting</th>
<th>Standing</th>
<th>Hopping 25X</th>
<th>Hopping 100X</th>
<th>Run around house</th>
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</table>
Use this pocket to hold your map from experiment on page 16 of Blood and Guts by Linda Allison

Map the Back of My Hand

Heart Facts

- The heart circulates the body’s blood more than 1,000 times per day.
- The heart pumps 5,000 to 6,000 quarts of blood per day.
- Up to 12 gallons per minute can be pumped in times of heavy exercise.
- Laid end to end, all the body’s blood vessels would measure about 60,000 miles.
- Your heart is about the same size as your fist.
Cut out each shape (cut along the dark black lines; do not cut any dotted lines). Fold each book in half (four small books and one large book). Glue the back sides of the small books into the inside of your large book. Use with page 24 of *Blood and Guts* by Linda Allison.
TYPES OF BONES
The brain is about the size of your fist.

If the brain was lifted out of the skull and spread out, it would cover a page of a newspaper about two feet square.

Brains contain more water than blood! They are about 85% water.

Brains contain more water than blood! They are about 85% water.
Cut book out as one piece. Fold in half. Cut the six books out (on the next two pages); fold in half.

Open the large book. Paste three miniature books on the right side of the book and three miniature books on the left side.
1. Lungs are the only organ in the body light enough to float on water.

2. The total surface area of the lungs is about 25 times that of the body’s skin surface.

3. You can't hold your breath until you die—no matter how hard you try.
Cut out book as one piece. Fold on solid black line (fold up). Cut dotted line. You should have a space at the top of this book to write a title. You can also turn it upside down and put the title on the bottom.

Vocal Cords

Use with page 68 of Blood and Guts by Linda Allison
At birth, humans have 300 bones. By the time they are adults, they only have 206 because some have fused together.

Half of your bones are in your hands and feet.

One person in twenty has an extra rib. This extra rib is three times more common in males.

An elderly person often develops a slight curve in the spine. Right-handed people curve right, and left-handed people curve left.
Cut out the three circles (two more are on the next page). Fold each one in half. Glue the back of the left half of the first circle to the front of the left half of the second circle. Take the third circle. Glue the back of the left half of the third circle to the back of the right half of the first circle. Fold so that you can open the book once to the right and once to the left. So, the “middle section” is actually the front of your book.

Cut out book as one piece. Accordion fold. Paste back of last piece to your lapbook or notebook.
The average person eats 3 pounds of food each day, or 1,095 pounds of groceries each year.

Your mouth makes about 1/2 quart of saliva daily. In total, your body secretes more than 7 quarts of assorted digestive juices.
HAIR
The Purpose of

Sensor
Protector
Insulator

Use with page 18 of Blood and Guts by Linda Allison.

www.ashecare.com
Every hair has a lifespan of 2-4 years. Curly hair responds to dampness by getting even tighter. A head of hair is like a forest. New hairs grow next to old growth. So when all the oldies in an area die, you don't have a bald spot.

An eyelash lives about 150 days.

Hairs are arranged in a pattern, like scales on a fish. If you sit in a squatting position, with your hands over your head, all your body hairs would point up.
Cut books out. Fold on lines (matchbook style).

Use with page 60 of *Blood and Guts* by Linda Allison

Use with p. 47 of *Blood and Guts* by Linda Allison
Cut book out as one piece. Fold triangle flaps under. Fold book in half.
Cut out rectangle as one piece. Fold on solid lines. You should have a book that opens like the “shutters” on a window. Fold the book in half on dotted line.

Use with page 14 of *Blood and Guts* by Linda Allison
Cut heart shapes out. Write one fact on each blank heart. Stack together with cover on top and staple.
Incisors

**REMOVE THIS AREA (Cut away so you have just a tab left)**

**Upper Teeth**
- Central Incisor: 7-8 Years
- Lateral Incisor: 8-9 Years
- Canine (Occlusal): 11-12 Years
- First Premolar (Buccal Aspect): 10-11 Years
- Second Premolar (Buccal Aspect): 16-17 Years
- First Molar: 6-7 Years
- Second Molar: 12-13 Years
- Third Molar (permanent tooth): 17-21 Years

**Lower Teeth**
- Central Incisor: 17-21 Years
- Lateral Incisor: 11-12 Years
- Canine (Occlusal): 6-7 Years
- First Premolar (Buccal Aspect): 11-12 Years
- Second Premolar (Buccal Aspect): 16-17 Years
- First Molar: 6-7 Years
- Second Molar: 12-13 Years
- Third Molar (permanent tooth): 7-8 Years

Canines

**REMOVE THIS AREA**

**Upper Teeth**
- Central Incisor: 7-8 Years
- Lateral Incisor: 8-9 Years
- Canine (Occlusal): 11-12 Years
- First Premolar (Buccal Aspect): 16-17 Years
- Second Premolar (Buccal Aspect): 10-11 Years
- First Molar: 6-7 Years
- Second Molar: 12-13 Years
- Third Molar: 17-21 Years

**Lower Teeth**
- Central Incisor: 17-21 Years
- Lateral Incisor: 11-12 Years
- Canine (Occlusal): 6-7 Years
- First Premolar (Buccal Aspect): 11-12 Years
- Second Premolar (Buccal Aspect): 16-17 Years
- First Molar: 6-7 Years
- Second Molar: 12-13 Years
- Third Molar: 7-8 Years

Assembly Directions:

Cut the five strips along the solid outer lines. If there is a rectangle piece in the right corner of the strip, cut it off as indicated (remove this area). Stack your strips in order with cover on top and staple where indicated.

Use with page 33 of Blood and Guts by Linda Allison
<table>
<thead>
<tr>
<th>Skeletal</th>
<th>Types of Muscles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac</td>
<td>Smooth</td>
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