Lots of Science Library Books

Each *Lots of Science Library Book* is made up of 16 inside pages, plus a front and back cover. All the covers to the *Lots of Science Library Books* are located at the front of this section. The covers are followed by the inside pages of the books.

How to Photocopy the *Lots of Science Library Books*

As part of their *Great Science Adventure,* your students will create *Lots of Science Library Books.* The *Lots of Science Library Books* are provided as consumable pages which may be cut out of the *Great Science Adventures* book at the line on the top of each page. If, however, you wish to make photocopies for your students, you can do so by following the instructions below.

To photocopy the inside pages of the *Lots Of Science Library Books:*

1. Note that there is a "Star" above the line at the top of each *LSLB* sheet.

2. Locate the *LSLB* sheet that has a Star on it above page 16. Position this sheet on the glass of your photocopier so the side of the sheet which contains page 16 is facing down, and the Star above page 16 is in the left corner closest to you. Photocopy the page.

3. Turn the *LSLB* sheet over so that the side of the *LSLB* sheet containing page 6 is now face down. Position the sheet so the Star above page 6 is again in the left corner closest to you.

4. Insert the previously photocopied paper into the copier again, inserting it face down, with the Star at the end of the sheet that enters the copier last. Photocopy the page.

5. Repeat steps 1 through 4, above, for each *LSLB* sheet.

To photocopy the covers of the *Lots of Science Library Books:*

1. Insert "Cover Sheet A" in the photocopier with a Star positioned in the left corner closest to you, facing down. Photocopy the page.

2. Turn "Cover Sheet A" over so that the side you just photocopied is now facing you. Position the sheet so the Star is again in the left corner closest to you, facing down.

3. Insert the previously photocopied paper into the copier again, inserting it face down, with the Star entering the copier last. Photocopy the page.

4. Repeat steps 1 through 3, above, for "Cover Sheets" B, C, D, E, and F.

Note: The owner of this book has permission to photocopy the *Lots of Science Library Book* pages and covers for classroom use only.

How to assemble the *Lots of Science Library Books*

Once you have made the photocopies or cut the consumable pages out of this book, you are ready to assemble your *Lots of Science Library Books*. To do so, follow these instructions:

1. Cut each sheet, both covers and inside pages, on the solid lines.

2. Lay the inside pages on top of one another in this order: pages 2 and 15, pages 4 and 13, pages 6 and 11, pages 8 and 9.

3. Fold the stacked pages on the dotted line, with pages 8 and 9 facing each other.

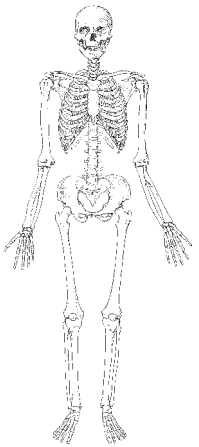
4. Turn the pages over so that pages 1 and 16 are on top.

5. Place the appropriate cover pages on top of the inside pages, with the front cover facing up.

6. Staple on the dotted line in two places.

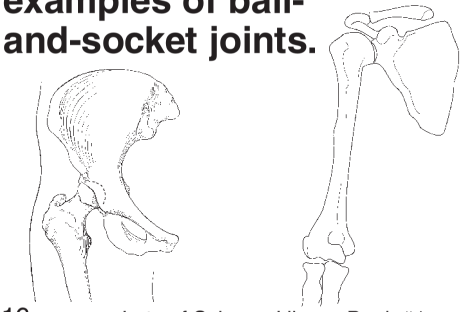
You now have completed *Lots of Science Library Books*.

What is the skeletal system?



Lots of Science Library Book #1

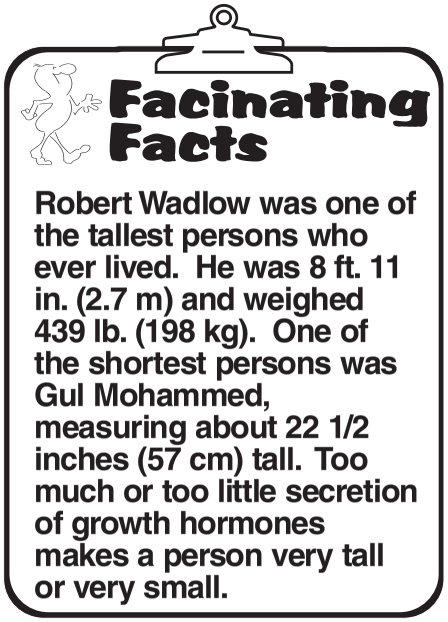
A ball-and-socket joint can be twisted like a computer joystick. It allows movement in many directions and allows rotating movements. The shoulder and hip are examples of ball-and-socket joints.



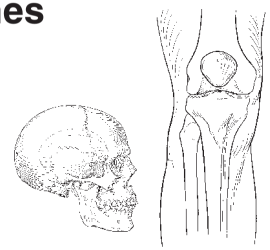
When you look at a person's body, what do you see? You see the exterior face, hair, arms, and legs. Hidden inside the human body there are incredible systems that work together like magic.

4) All the body's red blood cells and some white blood cells are produced within the marrow of bones. Marrow contains many nerves and blood vessels.

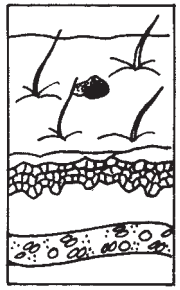
The process by which blood cells are produced is called hemopoiesis.



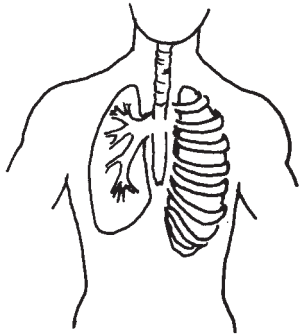
Bones are connected to other bones. The place where two bones meet is called a joint. Joints allow bones to move in certain directions. Some bones move freely, such as the hip and knees; other bones are fixed, such as the skull.



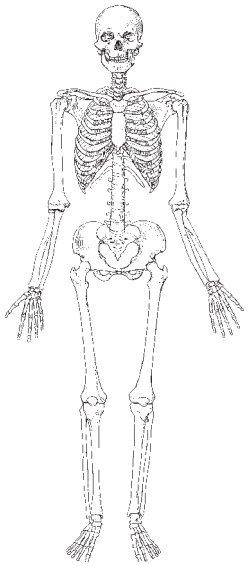
Cells are the building blocks of the human body. Groups of similar cells make up tissues. Groups of tissues that work together are called organs. Cells, tissues, and organs make up the systems in the human body.



2) The skeleton protects internal organs such as the heart, lungs, and brain.

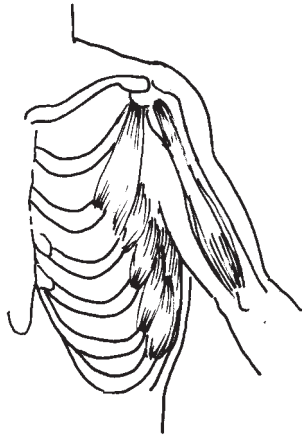


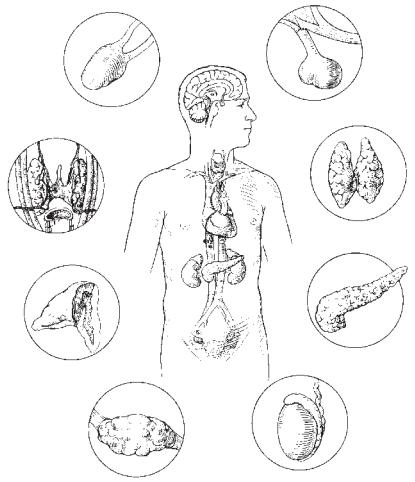
Ribs protect the heart and lumgs.



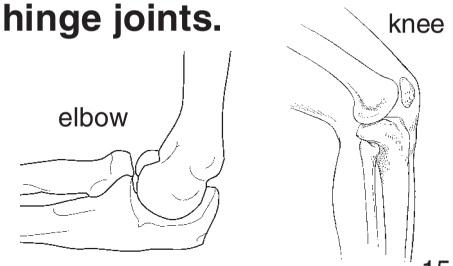
This framework of bones is called a skeleton. All the bones and cartilage of the human body make up the skeletal system. Cartilage is similar to bone, but cartilage does not contain the mineral compounds found in bone. Therefore, cartilage is not as hard and brittle as bone. Cartilage is firm yet flexible. Your ears and the tip of your nose are made out of cartilage.

3) Bones anchor muscles to provide movement.



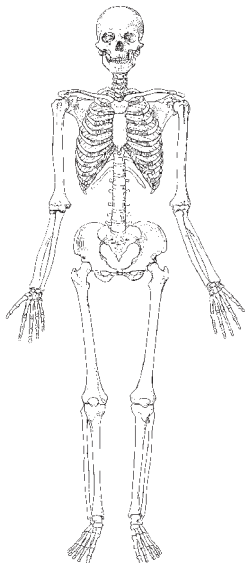


There are two main types of moveable joints: hinge joint and ball-and-socket joint. The hinge joint moves in one direction only. A hinge joint is strong. The elbow and knee are examples of hinge joints.



The skeletal system provides four main functions:

1) The bones of the skeleton are arranged in such a manner to give the body shape and support.



The human body is supported by a framework of bones similar to the framework of a building. Like the beams of a building the size and shape of bones differ depending on their function and location. The human body is more amazing than the most spectacular building.