

Overview of Lesson This lesson draws on the students’ experiences with Anatomy Browser to explore the bones of the skeletal system, reviewing and reinforcing key vocabulary. This lesson can be shortened (by using fewer labels) to fill those awkward time gaps throughout the school day (such as waiting to go to lunch, or before packing up to go home).

Materials Needed Age-appropriate anatomy textbook or map of the human body
 White labels/stickers containing the following bone vocabulary terms:

Cranium	Mandible	Scapula	Humerus
Radius	Carpals	Metacarpals	Costals
Vertebrae	Femur	Tibia	Fibula
Talus	Calcaneus	Tarsals	Metatarsals
Phalanges	Patella	Pelvis	Clavicle

Optional: Red labels containing the following muscular terms:

<i>Abdominal aponeurosis</i>	<i>Biceps brachii</i>	<i>Deltoid</i>	<i>Flexor Carpi</i>
<i>Hip adductors</i>	<i>Intercostals</i>	<i>Internal oblique</i>	<i>Trapezius</i>
<i>Orbicularis oculi</i>	<i>Quadriceps femoris</i>	<i>Temple</i>	<i>Zygomaticus</i>

Content of Lesson Students may complete this activity either in groups (to complete it in the smallest amount of time), pairs, or on their own (to complete it in the greatest amount of time) depending on the classroom schedule.

Have the students select a partner/group member who will serve as the “skeleton” (if working independently, each student will fill this role for his or her self).

Give each grouping of students, however they’ve been divided, a sheet of labels containing the bone vocabulary terms. Acknowledge that the class is welcome to utilize their anatomy textbooks to assist in properly labeling their human “skeleton”, and then instruct them to begin labeling their partner/group member (or themselves) in such a way that the name of the

Anatomy Browser

Middle School - Bones in the Body

TERM 2013

LOCATION G+L+S

PROGRAM VideoGames and Learning

bone is placed on the proper area of the body.

Optional: students can participate in the same process, but with the added challenge of using the muscular vocabulary. This will both lengthen the activity and make it more difficult.

Repeat this activity as often as desired to utilize it as an anatomy vocabulary and location memorization tool. Have students participate in this activity before exams to review core knowledge.

Vocabulary [See preceding vocabulary tables for both bone and muscle vocabulary terms]

Learning Objectives

- Students will be able to identify and label bones and muscles within the human body.
- Students will be able to work cooperatively in pairs or small groups.
- Students will be able to effectively utilize classroom resources (such as textbooks and human anatomy source material)
- Students will be able to reflect on previous experiences (such as the use of Anatomy Browser) while completing classroom activities.
- Students will be able to follow directions.

Educational Standards

- (MS-LS1-3)** Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.
- (HS-LS1-2)** Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
- (Literacy.RST.6-8.9)** Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
- (Literacy.RI.6.7)** Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
- (Literacy.RI.9-10.4)** Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings