# **Two-Column Notes: BONES Answer Key**

Article title: \_**How Bones Grow**\_\_\_\_\_\_\_\_\_\_\_\_ Today’s date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Instructions**

As you pair-read, take two-column notes about important facts, vocabulary, concepts and other information you want to remember or will need to use. Be sure to mark-up the article using your visual clues, questioning or note-taking techniques.

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| **Topic:** Bones of the human body  Check one: 🞎 Lecture 🗹 Text 🞎 Film 🞎 Presentation/Demonstration | |
| **Keywords/main ideas/quotations with page numbers**  **How bones grow**  Bones in a baby…  Baby bones made of… (vocab)  What happens as you grow…  Age this is completed  **Your spine**  Purpose of spine…  Types of vertebrae | **Your notes**  Newborns’ skeletons are very soft and pliable; infant skeletons are not made of the same rigid bones as adult skeletons; instead, they are composed of a temporary cartilage that forms into bones over time as the body matures  Cartilage= soft flexible connective tissue  Cartilage grows and replaced by bone, with help from calcium  By the time you’re 25  Spine holds the body upright; gives it structure  Cervical - The first 7 vertebrae, all in the neck; are smaller and lightly built  Thoracic - 12 vertebrae, each articulating with the 12 pairs of ribs  Lumbar - The lower 5 vertebrae, between the ribs and the sacrum; these have the largest vertebral bodies |

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| **Key words/main ideas/quotations with page numbers**  **Your ribs**  Main function and location…  Number of ribs and where they attach to the body…  **Your skull**  What is special about your skull?  **Your legs**  The leg bones connected to the …  Longest bone (also the strongest!)  Two other bones in your leg…  **Taking care of bones** | **Important ideas/notes**  Forming a core portion of the [human skeleton](http://en.wikipedia.org/wiki/Human_skeleton); attachments for the muscles of the neck, thorax, upper abdomen and back  Ribs 2 - 7 have a more traditional appearance. The following five sets are known as "false ribs" (*costae spuriae*), three of these share a common cartilaginous connection to the sternum, while the last two (ribs 11 and 12) are called floating ribs  Humans have 24 ribs (12 pairs)  Directly attached to the sternum through the [costal cartilage](http://en.wikipedia.org/wiki/Costal_cartilage); rib 1 is unique and harder to distinguish than other ribs; it is a short, flat, C-shaped bone  The human skull is a bony structure, the head in the skeleton, which supports the structures of the face and forms a cavity for the brain  Babies born with spaces between skull bones; spaces close up as you grow, forming suture joints that connect the bones  The leg and foot bones form part of the appendicular skeleton that supports the many muscles of the lower limbs  Connects to the knee bone and to the thigh bone and to the pelvis  femur  tibia and fibula  calcium  exercising  wearing protective gear (helmet, elbow and knee pads), depending on the activity and body parts at risk |