

Bone Up On Basics

Target Audience: *Upper Elementary to Adult*

Education Setting: *Interactive Display or Classroom Activity*

Objectives:

- Teach students about their bones and the nutrients needed for healthy bones.

Preparation

Prepare a game board as described below. Both “True or False” and “Dairy Jeopardy” questions are provided. Use either one or both sets of questions depending on your setting and audience.

Display: Create a game board using poster board. The following are examples of how to do this:

- Write each question on one side of separate cards, with the answer on the flip side. Attach the answer side of the cards to the board by Velcro or magnets.
- Write the questions on one side of a card, and the answer on the flip side. Make pockets on the board for question cards to be inserted.
- Fold the question card in half so that the question is on the outside and the answer is inside and revealed only when opening the card. Attach to the board with the question facing out.

Classroom: Choose one of the following examples:

- Create a game board as listed above for a display.
- Create a game board similar to above, but write point values on the outside, questions underneath, and have answers on a separate paper.
- Draw out a game board on a blackboard or whiteboard.
- Read the questions aloud without a game board (for example, as an icebreaker or introduction to a separate lesson)

Lesson Activity

Display: Allow the students to be hands-on learners as appropriate for the educational setting.

Classroom: Play a game as a supplemental activity for a bone or health lesson:

1. Divide the class into equal size teams (2-4 teams, depending on class)
2. Choose one team to start. Choose a spokesperson to select a category and point value, or encourage the team to work together to decide.
3. Educator should read the question aloud, giving that team time to come up with an answer. Have a spokesperson give the one answer that the team agrees on.
4. If they get the answer correct, that team receives the point value. Move to the next team to select a question. If they get the answer incorrect, another team has a chance to answer the question and receive the points. If no team is correct, no team receives points, and the educator should provide and explain the answer, and move to the next team to select the next question.
5. Continue play until all questions are asked or until a set time limit.

Bone Up On Basics

Bone up on Basics: True or False

Questions

Answers

Bones are dry and dead.

False

Bones are alive. They start to grow even before you are born. As you grow, your bones grow. Foods such as milk and yogurt have calcium. Calcium helps bones to grow strong and healthy.

Bones have blood inside.

True

Bigger, longer bones, such as the leg bone, have space inside. The spaces are filled with bone marrow. Red bone marrow makes red blood cells.

Bones give your body shape, support, and protection.

True

Without bones you would flop around like a wet noodle. Bones hold your body up and protect internal organs such as your heart.

A baby has about 350 bones but an adult has only 206.

True

Wiggle the top of your nose. It feels rubbery because it is made of cartilage. Babies' bones are soft and are made mostly of cartilage. As a baby grows, the bones fuse together and harden. For example, a baby's skull has many bone parts that fuse together later.

Bones that break cannot heal.

False

If you cut your skin, a scab forms and the skin begins to heal. If you break a bone, an inside scab or clot forms to stop the bone from bleeding. Then the body works to rebuild the bone and help it heal.

A giraffe has more bones in its neck than a human being has in his or her neck.

False

Both giraffes and human beings have seven bones in their necks. However, each giraffe neck bone is ten inches long!

The pinkie finger is the smallest bone.

False

The smallest bone is found inside the ear. This ear bone is so small (3 mm) that it can fit on the fingernail of your pinkie!

Bone Up On Basics

Bone up on Basics: Dairy Jeopardy

Them Bones

Nutrient Nuggets

Dairy Facts

100
points

It's the longest bone in your body

This is a nutrient that builds strong bones

About 75% of this mineral in the U.S. diet comes from dairy foods

200
points

These bones protect your heart and lungs

This vitamin helps the body absorb calcium

This is the most popular flavor of ice cream

300
points

You should worry about keeping your bones strong at this age

The nutrient in milk that helps healthy eyes and skin

This popular type of cheese is used on pizza

400
points

Your bones are made mostly of this

This percentage of calcium is in your bones

A pound of cheese is made from this many pounds of milk

500
points

The number of bones in an adult body

This amount of protein grams is in one glass of milk

An average cow produces this many glasses of milk per day

Bone Up On Basics

Bone up on Basics: Dairy Jeopardy – ANSWERS

Them Bones:

- 100: thigh bone (or femur)
- 200: ribs
- 300: any age
- 400: calcium
- 500: 206

Nutrient Nuggets:

- 100: calcium
- 200: vitamin D
- 300: vitamin A
- 400: 99 percent
- 500: 8 grams

Dairy Data:

- 100: calcium
- 200: vanilla
- 300: mozzarella
- 400: 10 pounds
- 500: 90 glasses