



KidsHealth.org/classroom

Teacher's Guide

This guide includes:

- Standards
- Related Links
- Discussion Questions
- Activities for Students
- Reproducible Materials

Standards

This guide correlates with the following National Health Education Standards:

Students will:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- Demonstrate the ability to access valid information and products and services to enhance health.
- Demonstrate the ability to use goal-setting skills to enhance health.
- Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- Demonstrate the ability to advocate for personal, family, and community health.

National Health Education Standards:
www.cdc.gov/healthyschools/sher/standards/index.htm

These activities will help your students understand what bones, muscles, and joints are and how they work together to keep us moving!

Related KidsHealth Links

Articles for Kids:

Your Bones

KidsHealth.org/en/kids/bones.html

Movie: Bones & Skeletal System

KidsHealth.org/en/kids/ssmovie.html

Your Muscles

KidsHealth.org/en/kids/muscles.html

Movie: Muscular System

KidsHealth.org/en/kids/msmovie.html

The Facts About Broken Bones

KidsHealth.org/en/kids/broken-bones.html

Cool Cast Facts

KidsHealth.org/en/kids/casts.html

Strains and Sprains Are a Pain

KidsHealth.org/en/kids/strains-sprains.html

Getting an X-ray (video)

KidsHealth.org/en/kids/video-xray.html

Discussion Questions

Note: The following questions are written in language appropriate for sharing with your students.

1. What parts of your body do you use to move? Do you know what body parts underneath your skin help you to move?
2. Why are bones important? Where are your bones? Are they hard or soft? How do you know? Can you feel any of your bones? Where? What do you think would happen if we didn't have any bones?
3. Joints are places where two bones meet. You have joints at your elbows and your shoulders. Move these joints and compare how they move. Do they move the same way or differently? Can you think of other places in your body where there are joints that move like your elbows and shoulders?
4. You have lots of muscles all over your body! Can you tighten the muscles in your arms or legs? Your face? How do your muscles feel when you tighten them? Can you tighten all of the muscles in your body whenever you want to? Your heart is a muscle. Can you tighten your heart?



Activities for Students

Note: The following activities are written in language appropriate for sharing with your students.

Mr. Bones Puzzle

Objectives:

Students will:

- Explore the bones in the skeletal system
- Assemble a puzzle of the human skeleton

Materials:

- “Mr. Bones Puzzle” handout
- Scissors
- Glue

Class Time:

20 minutes

Activity:

Poor Mr. Bones has lost some of his bones and needs your help to put all of his bones back in the right spots. Take a look at the “Mr. Bones Puzzle” handout. You’ll see Mr. Bones on one page and all of his missing bones on the other. Cut out the missing bones, and then take a look at Mr. Bones’ skeleton to figure out where each missing piece belongs. Then glue his bones back in place. Mr. Bones thanks you for your help!

Extensions:

1. Bones are hard, but you still need to protect them! One good way to take care of your bones is to wear a helmet, wrist pads, and knee pads when you ride a bike, skateboard, or scooter, or use rollerskates or rollerblades. Have someone take a picture of you wearing your helmet and pads (or draw one). Use your picture to make a safety poster to hang in your school or home, to remind your friends to protect their bones while playing.
2. Have you ever broken a bone? What did you have to do? How did your bone get better? Invite an orthopedist (a doctor who knows a lot about bones) to come to your classroom for a visit. Ask the doctor to talk about broken bones and how they heal. After the visit, write a thank-you note to the doctor, including one new fact you learned about bones.
3. Foods with calcium (like milk, cheese, spinach, and yogurt) and vitamin D (like tuna, salmon, cheese, and egg yolks) help your bones grow strong. Look through supermarket flyers for pictures of foods rich in calcium and vitamin D. Cut them out, and make a collage of strong bone foods! When you’re finished, hang your collage on your refrigerator at home to remind you and your family to feed your bones the nutrients they need.



Simon Says

Objectives:

Students will:

- Identify muscles and joints in their bodies
- Explore how muscles and joints move

Materials:

- “Simon Says” handout

Class Time:

15 minutes

Activity:

You have more than 600 muscles in your body, and now it’s time to move them! You’re going to play Simon Says with a classmate to move some of your muscles and joints (the places where two bones meet). Before you get started, take a look at the “Simon Says” handout. This picture points out different muscles and joints. You can use it to help you remember where some of your muscles and joints are, in case you forget while you’re playing the game. In the first round of the game, one person will be Simon and the other will do the motions. Simon should have his or her partner move his or her muscles and joints by saying things like, “Simon says: Move your wrist” or “Simon says: Move your abdominals (stomach muscles).” But remember - you should move only when Simon says so! If you move and Simon didn’t say so, the round will be over and you’ll switch roles. Have fun, and move those joints and muscles!

Extension:

Muscles need exercise to stay healthy and grow strong. Think about ways that you exercise your muscles now. Draw a picture of your favorite activity, game, or sport that makes you move your bones, muscles, and joints a lot.

Reproducible Materials

Handout: Mr. Bones Puzzle

KidsHealth.org/classroom/prekto2/body/parts/bones_handout1.pdf

Handout: Simon Says

KidsHealth.org/classroom/prekto2/body/parts/bones_handout2.pdf

Quiz

KidsHealth.org/classroom/prekto2/body/parts/bones_quiz.pdf

Quiz Answer Key

KidsHealth.org/classroom/prekto2/body/parts/bones_quiz_answers.pdf

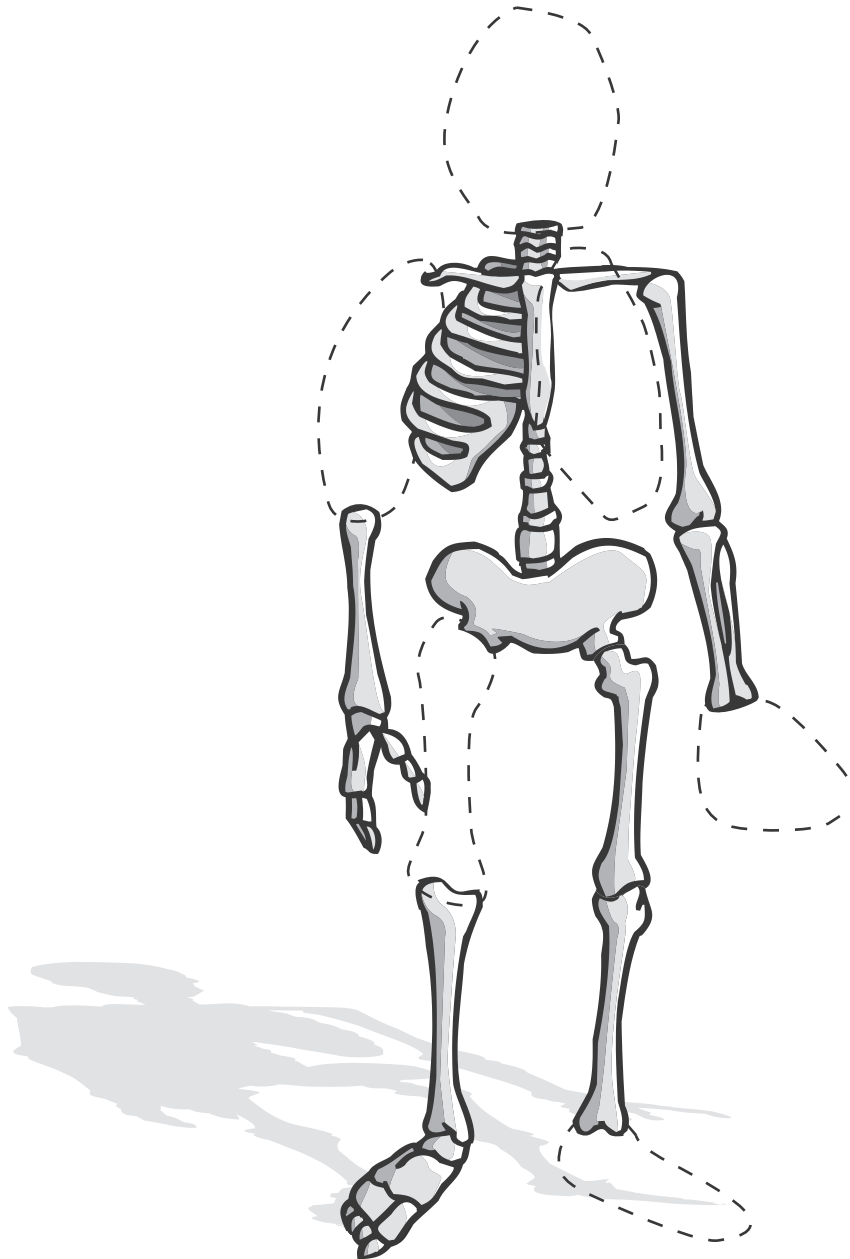


Name: _____

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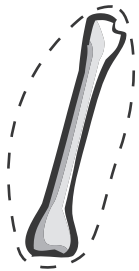
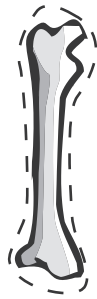
Mr. Bones Puzzle

Instructions: Poor Mr. Bones has lost some of his bones and needs your help to put all of his bones back in the right spots. Cut out the missing bones, and then take a look at Mr. Bones' skeleton to figure out where each missing piece belongs. Then glue his bones back in place. Mr. Bones thanks you for your help!





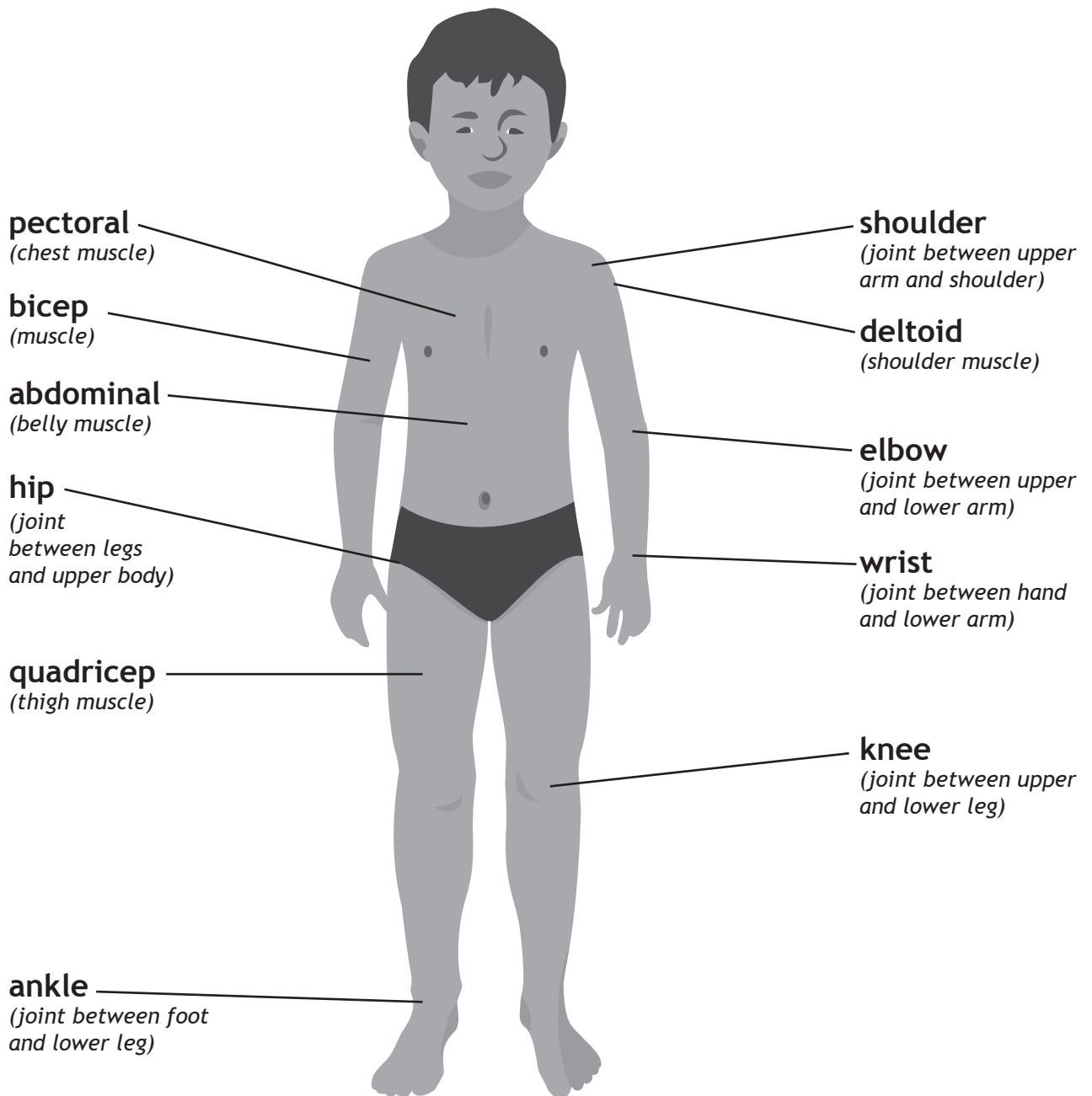
Mr. Bones Puzzle





Simon Says

Instructions: This picture points out different muscles and joints. You can use it to help you remember where some of your muscles and joints are, in case you forget while you're playing Simon Says.



pectoral
(chest muscle)

bicep
(muscle)

abdominal
(belly muscle)

hip
(joint
between legs
and upper body)

quadricep
(thigh muscle)

ankle
(joint between foot
and lower leg)

shoulder
(joint between upper
arm and shoulder)

deltoid
(shoulder muscle)

elbow
(joint between upper
and lower arm)

wrist
(joint between hand
and lower arm)

knee
(joint between upper
and lower leg)



Name: _____

Date: _____

Quiz

1. True or false: Your bones grow as you get older.

2. Your skull is a bone that helps protect your _____.

3. True or false: Some of your muscles move all the time without you even thinking about it.

4. Another word for a broken bone is a:
 - a) Sprain
 - b) Fracture
 - c) Bruise
 - d) Whoopsie

5. True or false: Joints have a special fluid inside them so they can move easily.



Quiz Answer Key

1. True or false: Your bones grow as you get older.
2. Your skull is a bone that helps protect your brain.
3. True or false: Some of your muscles move all the time without you even thinking about it.
4. Another word for a broken bone is a:
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5. True or false: Joints have a special fluid inside them so they can move easily.