



**Grade 2 – Body Systems**

**Unit 1**

**SOLs:**

- 2.1.A Identify structures that form body systems, to include the heart and lungs (cardiorespiratory system), bones (skeletal system), and muscles (muscular system).
- 2.1.F Recognize that germs cause colds and flu and can be spread from person to person (communicable).
- 2.2.A Identify possible consequences of not caring for cardiorespiratory, skeletal, and muscular systems.
- 2.2.F Explain the need for regular health checkups and screenings.
- 2.2.G Explain why parents/guardians keep health records for their children.
- 2.3.A Describe how heredity influences health and wellness.
- 2.3.C Demonstrate techniques for reducing or preventing the spread of germs and communicable diseases

**Title: Body Systems and Disease**

**Objectives/ Goals:** Students will understand various body structures and the

**Materials:**

- Large block paper; markers; pre-printed images of body parts (heart and lungs, skeleton, muscles)

**Procedure:**

1. Discussion and Activity: Learning about, Drawing and locating body parts.

Have students trace a partner’s body on a large piece of paper and draw. Provide information and assistance to students to mark the location of the heart and lungs; the esophagus and stomach where food is broken down into nutrients; bones; muscles. A similar activity can be conducted with pre-printed body outlines.

2. Activity: Body Systems at Work

Have students run in place for two minutes and place their hands over their hearts to feel the heart pumping;

Discussion: As students, how did your breathing change? Share the role of heart and lungs in breathing. As students, what helped them run (their bones and muscles)? How do their muscles feel? What happens if you don’t take care of heart, lungs, bones, and muscles (e.g., get sick, feel pain, can’t run/walk, limits activities)? How do you take care of your body (e.g., good nutrition, physical activity, rest, following parents and doctor’s advice)?

3. Discussion: Health Checks

Teach students to count their pulse. Use this as a segue to talk about the various health checks, screenings (e.g., eyes, ears, growth) and immunizations (e.g., flu) they get at the “doctor’s office.” Go around in a circle and ask each student to volunteer some type of

advice they have received on how to stay healthy at doctor's visits. Emphasize that one of the key pieces of advice that health care providers give is to wash hands, cover coughs to prevent spreading germs that cause flu, rashes, and other illnesses.

#### 4. Discussion and Activity: Health Records

Tell students that their parents keep track of their health checks, screenings, and immunizations in a health record so that in the future any new health care providers will have information in one place about their health. H

Have students create their own simple health record (e.g., Name, Age, Gender, Height (student, parent, family members), Hair Color (student, parents, family members), Eye Color (student, parent, family members), Favorite Foods, Favorite Activities). Ask students if any of them have the same hair color and eye color as their parents.

#### 5. Discussion and Activity: Heredity

Building on the results of the previous activity, discuss how characteristics like eye color, height, hair color are often inherited. Talk to students about other inherited traits and other ways that heredity influences health and wellness. Give students a piece of paper, preprinted with "I have inherited my \_\_\_\_\_ from my relatives." Have them report on one characteristic that they have inherited and post the results around the room.

#### 6. Additional resources to enhance this lesson are included in the reference section below.

### Assessment Ideas:

- Evaluate student participation in discussion and activities.

### References:

- AAAS Science NetLinks All Systems Go! <http://sciencenetlinks.com/afterschool-resources/all-systems-go>
- Education.Com Worksheets <http://www.education.com/worksheets/body/>
- Human Body for Kids Games, etc. <http://www.sciencekids.co.nz/humanbody.html>
- Interactive Sites for Education-Body Systems <http://interactivesites.weebly.com/body-systems.html>
- Kids Health Human Body PreK-2 <https://classroom.kidshealth.org/index.jsp?Grade=pk&Section=body>
- Kids Health How the Body Works <http://kidshealth.org/en/kids/center/htbw-main-page.html>
- Kids Health How the Body Works YouTube Video Series <https://www.youtube.com/playlist?list=PLRmb5AxU-JXgajvrrcozhkhMeSWa0XI0Z>
- My Senses Tell Me <http://sciencenetlinks.com/lessons/my-senses-tell-me/>
- PBS Arthur Family Health <http://www.pbslearningmedia.org/collection/arthur-family-health/#>

#### Lesson Plans

- Amazing Body Systems [http://www.coreknowledge.org/mimik/mimik\\_uploads/lesson\\_plans/271/Amazing%20Body%20System\\_s.pdf](http://www.coreknowledge.org/mimik/mimik_uploads/lesson_plans/271/Amazing%20Body%20System_s.pdf)
- Anatomy: A Fun Look at the Digestive System - <http://mypages.iit.edu/~smile/bi9307.html>
- Every Body Is Special [http://www.togethercounts.com/sites/togethercounts.com/files/thematic-unit/pdfs/Every\\_Body\\_Is\\_Special\\_Me\\_and\\_My\\_Choices.pdf](http://www.togethercounts.com/sites/togethercounts.com/files/thematic-unit/pdfs/Every_Body_Is_Special_Me_and_My_Choices.pdf)
- Heart Power - <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=5848#.V8jCnMdnFho>
- No Bones About It! [http://www.coreknowledge.org/mimik/mimik\\_uploads/lesson\\_plans/558/No%20Bones%20About%20It.pdf](http://www.coreknowledge.org/mimik/mimik_uploads/lesson_plans/558/No%20Bones%20About%20It.pdf)
- Our Systematic Body [http://www.coreknowledge.org/mimik/mimik\\_uploads/lesson\\_plans/1167/1\\_OurSystematicBody.pdf](http://www.coreknowledge.org/mimik/mimik_uploads/lesson_plans/1167/1_OurSystematicBody.pdf)
- Project Heart for Educators Grade 2 Curriculum <http://www.texasheart.org/ProjectHeart/Educators/Grade2/Curriculum.cfm>
- Straight from the Heart <http://mypages.iit.edu/~smile/bi9514.html>
- Super Hero Fitness <http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=5895#.V8iAdcdNFho>
- The Circulatory System [http://www.pbslearningmedia.org/resource/tdc02.sci.life.stru.lp\\_circula/the-circulatory-system/](http://www.pbslearningmedia.org/resource/tdc02.sci.life.stru.lp_circula/the-circulatory-system/)
- Top Five Body Shop [http://www.coreknowledge.org/mimik/mimik\\_uploads/lesson\\_plans/606/Top%20Five%20Body%20Shop.pdf](http://www.coreknowledge.org/mimik/mimik_uploads/lesson_plans/606/Top%20Five%20Body%20Shop.pdf)
- What Happens When You Eat? <http://mypages.iit.edu/~smile/bi9706.html>
- What Is Blood and How It Circulates In and Out of the Heart - <http://mypages.iit.edu/~smile/bi9009.html>
- What Makes This Machine of Ours Work?

[http://www.coreknowledge.org/mimik/mimik\\_uploads/lesson\\_plans/928/What%20Makes%20This%20Machine%20Of%20Ours%20Work.pdf](http://www.coreknowledge.org/mimik/mimik_uploads/lesson_plans/928/What%20Makes%20This%20Machine%20Of%20Ours%20Work.pdf)