

Grade 3 Science

Unit 5: Human Senses and Movement

7 lessons and a unit quiz. Use this pack with the **Human Senses and Movement Student Reader** (print it, or download it once from the course) to teach the whole unit without the internet.

What is in this pack

- A lesson plan for each chapter: the Big Question, words to know, which pages to read, questions to talk over and the activity pages.
- The unit quiz, ready to print.
- Answers for the teacher at the back: every discussion question and the quiz key.

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Lesson schedule

Two or three lessons a week, about 30 minutes each. Tick each one off as you go.

	Lesson	Reader pages	Activity pages
☐	Lesson 1: Returning a Serve	PDF pages 7–8	AP 1.1
☐	Lesson 2: Human Hearing	PDF pages 9–14	AP 2.1
☐	Lesson 3: Human Vision	PDF pages 15–20	AP 3.1
☐	Lesson 4: The Muscular System	PDF pages 21–26	—
☐	Lesson 5: The Skeletal System	PDF pages 27–32	AP 5.1
☐	Lesson 6: The Nervous System	PDF pages 33–38	AP 6.1
☐	Lesson 7: Helpful Body Technology	PDF pages 39–46	AP 7.1, AP 7.2
☐	Unit review and assessment	—	—
☐	Words quiz	—	—

Page numbers are the PDF page numbers of the Student Reader file, so they match what your PDF reader shows.

Lesson 1: Returning a Serve

THE BIG QUESTION

How does a human body return a table tennis serve?

Words to know

- **enable** — to make possible ced words and phrases are he unit that you should model for r use in isolated drill or memorization
- **serve** — to set a ball into motion initiating play in a game

Teacher’s lesson plan

Follow the Teacher Guide, PDF pages 18-22: the steps, materials and timing for this lesson.

Read

Read Student Reader, Chapter 1: “Returning a Serve”: PDF pages 7-8. Look at the pictures and maps together.

Talk it over

1. How does a human body return a table tennis serve?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How does a human body return a table tennis serve?
- Use one of today’s words in a sentence of your own.

Activity pages

- Activity Page 1.1: Ask Questions About Learning Table Tennis — Teacher Guide PDF page 56

Lesson 2: Human Hearing

THE BIG QUESTION

How does human hearing work?

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 23–28: the steps, materials and timing for this lesson.

Read

Read Student Reader, Chapter 2: “Human Hearing”: PDF pages 9–14. Look at the pictures and maps together.

Talk it over

1. What do you do during the week that requires you to raise your voice or shout so that others can hear you?
2. Which sense did the student use to detect sound?
3. Was it easier to know where the sound was coming from with one ear or two ears?
4. How does hearing help someone playing table tennis?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How does human hearing work?

Activity pages

- Activity Page 2.1: Take Care of Your Hearing — Teacher Guide PDF page 57

Lesson 3: Human Vision

THE BIG QUESTION

How does human vision work?

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 29–33: the steps, materials and timing for this lesson.

Read

Read Student Reader, Chapter 3: “Human Vision”: PDF pages 15–20. Look at the pictures and maps together.

Talk it over

1. How do you use your eyes to catch a ball?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How does human vision work?

Activity pages

- Activity Page 3.1: Investigating Eyes and Light — Teacher Guide PDF page 58

Lesson 4: The Muscular System

THE BIG QUESTION

How do muscles work in the human body?

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 34–38: the steps, materials and timing for this lesson.

Read

Read Student Reader, Chapter 4: “The Muscular System”: PDF pages 21–26. Look at the pictures and maps together.

Talk it over

1. Do you expect a table tennis player's heart to beat faster or slower during a game than after the game?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How do muscles work in the human body?

Lesson 5: The Skeletal System

THE BIG QUESTION

How does the skeleton work in the human body?

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 39–43: the steps, materials and timing for this lesson.

Read

Read Student Reader, Chapter 5: “The Skeletal System”: PDF pages 27–32. Look at the pictures and maps together.

Talk it over

1. How does the structure of bones compare to those of muscles and tendons?
2. In what ways is examining the bones of other animals helpful to understanding the human skeleton?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How does the skeleton work in the human body?

Activity pages

- Activity Page 5.1: Label a Skeleton — Teacher Guide PDF page 59

Lesson 6: The Nervous System

THE BIG QUESTION

How do nerves support senses and movement?

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 44–49: the steps, materials and timing for this lesson.

Read

Read Student Reader, Chapter 6: “The Nervous System”: PDF pages 33–38. Look at the pictures and maps together.

Talk it over

1. What would you do to get better at this race?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How do nerves support senses and movement?

Activity pages

- Activity Page 6.1: Your Nervous System at Play — Teacher Guide PDF page 60

Lesson 7: Helpful Body Technology

THE BIG QUESTION

How can inventions help with senses and movement?

Words to know

- **impaired** — not fully functioning
- **technology** — the use of science in solving problems

Teacher's lesson plan

Follow the Teacher Guide, PDF pages 50–54: the steps, materials and timing for this lesson.

Read

Read Student Reader, Chapter 7: “Helpful Body Technology”: PDF pages 39–46. Look at the pictures and maps together.

Talk it over

1. How can we grow more food for people to eat?
2. What's the best shoe design for running fast?

Answers are at the back of this pack.

Check for understanding

- Answer the Big Question in a sentence or two: How can inventions help with senses and movement?
- Use one of today's words in a sentence of your own.

Activity pages

- Activity Page 7.1: Write with a Pattern of Bumps — Teacher Guide PDF page 61
- Activity Page 7.2: Returning a Table Tennis Serve — Teacher Guide PDF page 62

UNIT REVIEW

Unit review and assessment

- Activity page answer key (for the teacher): Teacher Guide PDF pages 63–63

WORDS QUIZ

Human Senses and Movement

Name: _____ Date: _____

Circle the letter of the best answer.

1. Which word means “soft body tissue that contracts”?
 - a) lens
 - b) voluntary muscle
 - c) electrical impulse
 - d) muscle
2. Which word means “the clear part of the front of the eye that focuses light at the back of the eye”?
 - a) tibia
 - b) involuntary muscle
 - c) brain
 - d) lens
3. Which word means “to work for a specific purpose”?
 - a) tissue
 - b) auditory nerve
 - c) function
 - d) nervous system
4. Which word means “a fiber in the body that transmits impulses to and from the brain”?
 - a) voluntary
 - b) iris
 - c) ear canal
 - d) nerve
5. Which word means “the place where two bones are joined together by connective tissue”?
 - a) optic
 - b) brain
 - c) joint
 - d) detect
6. Which word means “the complex of bones that connect the trunk to the legs and contain the hip joints”?
 - a) pelvis
 - b) cornea
 - c) connective tissue
 - d) nervous system

- 7.** Which word means “the bone of the thigh, reaching from the hip to the knee”?
- a) femur
 - b) phalanges
 - c) iris
 - d) nervous system
- 8.** Which word means “rigid body material that provides structure and protection”?
- a) bone
 - b) connective tissue
 - c) vibrate
 - d) skull
- 9.** Which word means “the bones that make up the fingers and toes”?
- a) electrical impulse
 - b) detect
 - c) phalanges
 - d) skull
- 10.** Which word means “a signal carried through and between nerves”?
- a) femur
 - b) retina
 - c) function
 - d) electrical impulse
- 11.** Which word means “the spiral cavity in the inner ear that transfers vibration to the brain through the auditory nerve”?
- a) phalanges
 - b) cornea
 - c) cochlea
 - d) impaired
- 12.** Which word means “the use of science in solving problems”?
- a) auditory nerve
 - b) ear canal
 - c) electrical impulse
 - d) technology

Answers

Lesson 1: Returning a Serve

1. **How does a human body return a table tennis serve?**

You use your eyes and ears to sense the ball coming and your hands, arms, feet, and legs to hit it back across the net. Point out to students that the rest of the chapters in this unit will provide more details about how these body parts work together.

Formative Assessment Activity Page

Lesson 2: Human Hearing

1. **What do you do during the week that requires you to raise your voice or shout so that others can hear you?**

Play video games, talk to friends while riding the bus or eating in the school lunchroom, cheer at basketball games, call to someone from another room

2. **Which sense did the student use to detect sound?**

Hearing

3. **Was it easier to know where the sound was coming from with one ear or two ears?**

Two ears

4. **How does hearing help someone playing table tennis?**

The sound helps the player know where the ball has bounced.

Lesson 3: Human Vision

1. **How do you use your eyes to catch a ball?**

You have to look at the ball and look at your hands.

Lesson 4: The Muscular System

1. **Do you expect a table tennis player's heart to beat faster or slower during a game than after the game?**

It probably beat faster during the game SUPPORT—Support Grade 3 reading skills by comparing the words voluntary and involuntary. Make sure students notice that the only difference between the two is the common prefix in-, meaning “not.” Point out that if students can remove the prefix and recognize the word that remains, they may be able to determine the word’s meaning. Share other examples of words that have the prefix in-, such as incomplete and inexpensive.

Lesson 5: The Skeletal System

1. **How does the structure of bones compare to those of muscles and tendons?**

Bones are harder and stiffer than tendons or muscle.

2. **In what ways is examining the bones of other animals helpful to understanding the human skeleton?**

Some kinds of animals have skeletons that are similar to humans, so looking at chicken bones can give us some ideas about how human bones fit together or work to

hold us up.

Lesson 6: The Nervous System

1. **What would you do to get better at this race?**

See Know the Science 1.

Lesson 7: Helpful Body Technology

1. **How can we grow more food for people to eat?**

How can people get to Mars and back?

2. **What's the best shoe design for running fast?**

How can kids protect their eyes while playing sports?

Unit quiz key

1. d 2. d 3. c 4. d 5. c 6. a 7. a 8. a 9. c 10. d 11. c 12. d