

Structured Literacy in Grade 5: Human health and the body systems

Curriculum Expectations

Overall Expectations (Strand B: Life Systems)

- **B1. Relating Science and Technology to Our Changing World:** Analyse impacts of various social and environmental factors, human activities, and technologies on human health.
- **B2. Exploring and Understanding Concepts:** Demonstrate an understanding of the structure and function of human body systems and interactions within and between systems.

Specific Expectations

- **B1.1:** Assess effects of a variety of social and environmental factors on human health, and describe ways in which individuals can reduce the harmful effects of these factors and take advantage of those that are beneficial.
- **B1.2:** Evaluate beneficial and harmful effects of various technologies on human health and body systems, while taking different perspectives into consideration.
- **B2.1:** Identify systems of the human body, and describe their basic function.
- **B2.2:** Describe the basic structure and function of vital organs in various systems in the human body.
- **B2.3:** Describe interrelationships between human body systems.

Lesson Objectives

By the end of the lesson, students will:

1. Develop French vocabulary related to human health and body systems.
2. Use reading comprehension strategies to analyze a French text about the human body and health.
3. Write a short paragraph in French explaining how a specific body system works and how it interacts with others.
4. Apply structured literacy strategies to improve their ability to decode, comprehend, and communicate scientific concepts in French.

Lesson Design

1. Minds On (15 minutes)

- **Activate Prior Knowledge:** Begin with a class discussion in French about the human body. Ask:
 - "Quels systèmes du corps humain connaissez-vous?"
 - "Pourquoi est-il important de comprendre comment fonctionne notre corps?"
- **Introduce Key Vocabulary:** Use a word wall or flashcards to introduce key terms in French, such as:
 - *le système circulatoire* (circulatory system)
 - *le système respiratoire* (respiratory system)
 - *le système digestif* (digestive system)
 - *le cerveau* (brain)
 - *le cœur* (heart)
 - *les poumons* (lungs)
 - *les artères* (arteries)
 - *les veines* (veins)
- **Phonemic Awareness Activity:** Focus on French-specific sounds in key terms (e.g., nasal vowels in *poumons* or *système*). Have students practice pronouncing these words aloud.

2. Action (45 minutes)

Part A: Reading Comprehension (20 minutes)

- **Text Selection:** Provide students with a short, level-appropriate French text about the circulatory and respiratory systems. For example, an article titled "*Comment le cœur et les poumons travaillent ensemble pour maintenir la vie.*"
- **Pre-Reading Activity:**
 - Teach students to preview the text by identifying headings, subheadings, and bolded words.
 - Use a graphic organizer to predict what the text might discuss based on these features.
- **During Reading:**
 - Teach students to use **chunking** to break down complex sentences into smaller parts. For example:
 - Sentence: "*Le cœur pompe le sang riche en oxygène dans les artères, qui transportent le sang vers les organes du corps.*"
 - Chunk: "*Le cœur pompe le sang / riche en oxygène / dans les artères / qui transportent le sang / vers les organes du corps.*"
 - Highlight **cognates** (e.g., *oxygène*, *artères*) to help students connect French words to their English equivalents.

- Use **context clues** to infer the meaning of unfamiliar words. For example, "*pompe*" can be understood from the context of "*le cœur pompe le sang.*"
- **Post-Reading Activity:**
 - Have students summarize the main idea of the text in one sentence using a sentence frame:
 - "*Le texte explique que...*"

Part B: Vocabulary Development (10 minutes)

- **Word Mapping:** Teach students to break down complex words into roots, prefixes, and suffixes. For example:
 - *circulatoire*: *circul-* (circle, flow) + *-atoire* (related to).
- **Cognate Awareness:** Create a chart of French-English cognates related to body systems (e.g., *respiratoire*, *système*, *organe*).
- **Interactive Activity:** Play a matching game where students match French terms to their definitions or images.

Part C: Writing Activity (15 minutes)

- **Prompt:** Ask students to write a short paragraph in French explaining how the circulatory system works and how it interacts with the respiratory system. Use a sentence frame to scaffold their writing:
 - "*Le système circulatoire transporte... Le cœur pompe... Les poumons fournissent... Ces deux systèmes travaillent ensemble pour...*"
- **Peer Review:** Pair students to review each other's paragraphs, focusing on clarity, vocabulary use, and grammar. Provide a checklist with criteria such as:
 - Did they use at least three key vocabulary words?
 - Is their explanation clear and logical?
 - Are their sentences grammatically correct?

3. Consolidation (20 minutes)

Part A: Group Discussion (10 minutes)

- Have students share their paragraphs in small groups. Encourage them to use the key vocabulary and explain their reasoning.
- Use guiding questions to deepen the discussion:
 - "*Pourquoi est-il important que les systèmes du corps humain travaillent ensemble?*"
 - "*Quels facteurs peuvent affecter le fonctionnement de ces systèmes?*"

Part B: Reflection (10 minutes)

- **Self-Assessment:** Provide students with a reflection sheet where they evaluate their own learning:
 - "*Quels mots nouveaux avez-vous appris aujourd'hui?*"

- *"Quelle stratégie de lecture ou d'écriture vous a aidé le plus?"*
- **Class Feedback:** Discuss as a class which strategies were most helpful for understanding the text and completing the writing task.

Structured Literacy Strategies in Action

1. **Phonological Awareness:** Focused on French-specific sounds (e.g., nasal vowels, silent letters).
2. **Systematic Vocabulary Instruction:** Explicit teaching of key terms related to body systems, with activities to reinforce understanding.
3. **Reading Comprehension:** Use of chunking, context clues, and cognates to help students decode and understand French texts.
4. **Writing Scaffolds:** Sentence frames and peer review to support students in organizing and expressing their ideas in French.
5. **Graphic Organizers:** Tools like word maps and prediction charts to help students process and organize information.

Assessment

- **Formative Assessment:** Observe students during reading and writing activities, providing feedback on their use of strategies.
- **Summative Assessment:** Evaluate their written paragraphs using a rubric that assesses:
 - Use of key vocabulary.
 - Clarity and organization of ideas.
 - Grammar and sentence structure.
- **Self-Assessment:** Use reflection sheets to encourage metacognition and self-monitoring of literacy skills.

Cross-Curricular Connections

- **Health and Physical Education:** Discuss how exercise impacts the circulatory and respiratory systems.
- **Social Studies:** Explore how access to healthcare and clean air affects human health in different communities.
- **Mathematics:** Analyze data on heart rates or lung capacity and create graphs to represent findings.