

Reading Guide

This guide is intended to provide activities for using the reference materials in the *Rx for Science Literacy* manual as a way of integrating the *Reading Standard for Informational Text from the Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects* into the science classroom.

- Why did the author write this selection?
- What was the point the author wanted to make in this selection?
- What are the major ideas in this selection?
- List a major idea for this selection and provide 2 supporting details for this idea.
- How does the author use aids, such as pictures or graphs, to convey the main idea of the selection?
- What 3 key vocabulary words and their definitions are found in the text?
- What 3 words are important to understand in order to discuss this selection?
- If you were the author of this selection, how would you change the piece to entice more people to read this selection?
- In sentences, write 3 things you learned from this reading selection.
- Identify the key points from this article.
- How did the author present the major ideas of this selection?
- How would you change the text to make it more appealing to students in your grade level?
- What other resources would be best to read to have a better understanding of this selection?
- What aids, such as pictures or graphs, should the author have used to make this selection more appealing?
- Which sentence states the main idea of this selection?

Suggested Reading Ranges

The *Rx for Science Literacy* manual has many reference and handout sections that should be used to integrate the *Reading Standard for Informational Text from the Common Core*. This chart matches the references or handouts to suggested grade ranges.

Unit I-Chapter 1: What is Science?

Title	Page	Suggested Grades												
		K	1	2	3	4	5	6	7	8	9	10	11	12
What is Science?	I-1.3							•	•	•	•	•	•	•
Great “Truths”	I-1.7	•	•	•	•	•	•							
Some Famous Biological Scientists, Their Discoveries and Trends	I-1.11	•	•	•	•	•	•							

Unit I-Chapter 2: What is Biomedical Research?

Title	Page	Suggested Grades												
		K	1	2	3	4	5	6	7	8	9	10	11	12
What is Basic Biomedical Research?	I-2.2							•	•	•	•	•	•	•
Basic Heart Facts	I-2.4							•	•	•	•	•	•	•
What is Applied Research?	I-2.10							•	•	•	•	•	•	•
What is Clinical Research?	I-2.14										•	•	•	•

Unit I-Chapter 3: Biomedical Research Methods

Title	Page	Suggested Grades												
		K	1	2	3	4	5	6	7	8	9	10	11	12
Biomedical Research Methods	I-3.3										•	•	•	•
Chemical, Computer and Mathematical Models	I-3.4										•	•	•	•
<i>In Vitro</i> Studies	I-3.6										•	•	•	•
Nonhuman Animal Models	I-3.8										•	•	•	•
Human Clinical Trials	I-3.12										•	•	•	•
Clinical Studies	I-3.15										•	•	•	•
Epidemiological Studies	I-3.17										•	•	•	•

Suggested Reading Ranges

Unit I-Chapter 4: Benefits of Biomedical Research

Title	Page	Suggested Grades													
		K	1	2	3	4	5	6	7	8	9	10	11	12	
Did You or Will You Ever?	I-4.9	•	•	•	•	•	•								
What Difference Has Biomedical Research Made to Human Health?	I-4.12												•	•	•
Human Vaccines Developed Through Biomedical Research	I-4.22								•	•	•	•	•	•	•
Polio: A Success Story	I-4.35								•	•	•	•	•	•	•
History of Polio	I-4.37												•	•	•
AIDS: A Need for Continuing Research	I-4.41												•	•	•
Biomedical Research for Animal Health	I-4.53												•	•	•

Unit II-Chapter 2: Why Use Animals?

Title	Page	Suggested Grades													
		K	1	2	3	4	5	6	7	8	9	10	11	12	
Why Use Animals?	II-2.2												•	•	•

Unit II-Chapter 3: Advances Based on Animal Research

Title	Page	Suggested Grades													
		K	1	2	3	4	5	6	7	8	9	10	11	12	
Without Animal Research...	II-3.3								•	•	•	•	•	•	•
Research Partners	II-3.5												•	•	•

Unit II-Chapter 4: Number and Species of Animals Used

Title	Page	Suggested Grades													
		K	1	2	3	4	5	6	7	8	9	10	11	12	
Number and Kinds of Animals Used in Biomedical Research	II-4.2												•	•	•

Suggested Reading Ranges

Unit II-Chapter 5: Care of Research Animals

Title	Page	Suggested Grades												
		K	1	2	3	4	5	6	7	8	9	10	11	12
Caring for Research Animals	II-5.2							•	•	•				
Laws, Regulations and Guidelines Governing Animal Research	II-5.4										•	•	•	•
Responsibilities of an Animal Care and Use Committee	II-5.8										•	•	•	•

Unit III-Chapter 2: Animal Research: Issues and Answers

Title	Page	Suggested Grades												
		K	1	2	3	4	5	6	7	8	9	10	11	12
Animal Research vs. Animal Rights	III-2.2										•	•	•	•
Issues and Answers	III-2.11							•	•	•				
Issues and Answers: Animal Research Is Bad Science	III-2.13							•	•	•	•	•	•	•
Issues and Answers: Unnecessary Duplication of Research	III-2.16										•	•	•	•
Issues and Answers: Alternatives	III-2.16										•	•	•	•
Issues and Answers: Regulation of Animal Research	III-2.18										•	•	•	•
Issues and Answers: Product Safety Testing	III-2.21										•	•	•	•
Science and Self-Doubt	III-2.24										•	•	•	•

Unit III-Chapter 3: Transgenic Animals

Title	Page	Suggested Grades												
		K	1	2	3	4	5	6	7	8	9	10	11	12
Transgenic Animals	III-3.2										•	•	•	•

Unit III-Chapter 4: Therapeutic vs. Reproductive Cloning: Scientific Realities, Public Controversy

Title	Page	Suggested Grades												
		K	1	2	3	4	5	6	7	8	9	10	11	12
Therapeutic vs. Reproductive Cloning: Scientific Realities, Public Controversy	III-4.2										•	•	•	•
A Forum on Human Cloning	III-4.11										•	•	•	•

Suggested Reading Ranges

Unit IV-Chapter 1: Careers in the Biosciences

Title	Page	Suggested Grades															
		K	1	2	3	4	5	6	7	8	9	10	11	12			
Becoming a Bioscientist	IV-1.3													•	•	•	•
Bioscience Careers	IV-1.13													•	•	•	•

Unit IV-Chapter 2: Genetics Primer

Title	Page	Suggested Grades															
		K	1	2	3	4	5	6	7	8	9	10	11	12			
It's All in the Genes	IV-2.2													•	•	•	•

Unit IV-Chapter 3: Nanobiotechnology

Title	Page	Suggested Grades															
		K	1	2	3	4	5	6	7	8	9	10	11	12			
Nanobiotechnology	IV-3.4													•	•	•	•

Unit IV-Chapter 4: Regenerative Medicine

Title	Page	Suggested Grades															
		K	1	2	3	4	5	6	7	8	9	10	11	12			
Regenerative Medicine	IV-4.5													•	•	•	•

Unit IV-Chapter 5: New Technologies in Vaccines

Title	Page	Suggested Grades															
		K	1	2	3	4	5	6	7	8	9	10	11	12			
New Technologies in Vaccines	IV-5.6													•	•	•	•