

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 two 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 three key vocabulary words and their definitions are found in the text?
- What three 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 three 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

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		
What Difference Has Biomedical Research Made to Human Health?	I-4.12									•	•	•	•	•	•	•
Human Vaccines Developed Through Biomedical Research	I-4.23									•	•	•	•	•	•	•
Polio: A Success Story	I-4.36									•	•	•	•	•	•	•
History of Polio	I-4.38												•	•	•	•
AIDS: A Need for Continuing Research	I-4.42												•	•	•	•
Biomedical Research for Animal Health	I-4.54												•	•	•	•

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												•	•	•	•
Most Commonly Used Animal Models	II-2.8									•	•	•	•	•	•	•
Animals Studied for Their Unique Characteristics	II-2.9			•	•	•	•	•	•	•	•					

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-3.4									•	•	•	•	•	•	•
Research Partners	II-3.7												•	•	•	•
Milestones in Biomedical Research Benefiting Humans and Animals	II-3.12												•	•	•	•

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													•	•	•	•
IACUC Research Proposals for Review	II-5.12													•	•	•	•

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-2.3													•	•	•	•
Issues and Answers	III-2.12									•	•	•					
Issues and Answers: Is Animal Research Good Science?	III-2.14									•	•	•	•	•	•	•	•
Issues and Answers: Is There Unnecessary Duplication of Research?	III-2.17													•	•	•	•
Issues and Answers: Can Alternatives Replace Animal Research?	III-2.18													•	•	•	•
Issues and Answers: Regulation of Animal Research	III-2.19													•	•	•	•
Issues and Answers: Product Safety Testing	III-2.22													•	•	•	•
Science and Self-Doubt	III-2.25													•	•	•	•

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													•	•	•	•

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-1.15													•	•	•	•

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-2.3													•	•	•	•
Editing Life's Instructions	IV-2.31													•	•	•	•
CRISPR—A Tool to Edit Life's Instructions	IV-2.32													•	•	•	•

Unit IV-Chapter 3: Nanobiotechnology

Title	Page	Suggested Grades															
		K	1	2	3	4	5	6	7	8	9	10	11	12			
Nanobiotechnology	IV-3.3													•	•	•	•

Unit IV-Chapter 4: Regenerative Medicine

Title	Page	Suggested Grades															
		K	1	2	3	4	5	6	7	8	9	10	11	12			
Healing Promise	IV-4.8													•	•	•	•
Background Science	IV-4.20													•	•	•	•
Ethical and Societal Issues in Regenerative Medicine	IV-4.38													•	•	•	•
Regenerative Medicine in Space	IV-4.97													•	•	•	•
AI in Regenerative Medicine	IV-4.112													•	•	•	•

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-5.3													•	•	•	•
Will This Vaccines Work?	IV-5.53													•	•	•	•