

TITLE: Regents Prep for Living Environment (Biology)

DESCRIPTION: This Guide provides everything you need to prepare students for the Living Environment (Biology) Regents Exam and recommends how to use the materials in different Regents Prep scenarios:

- **Four sessions** How to prioritize the resources for use with students who understand the content but need to prep for taking the test.
- **Twelve sessions** How to use the resources with students who need to review the living environment content, along with practice for taking the test.

A complete list of the resources available on the NYS MEP website is at the end of the Facilitator Guide. *New July 2021:* The Content Review Lessons are available in English and Spanish.

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FACILITATOR GUIDE

ABOUT THE REGENTS EXAM

The Living Environment Exam consists of approximately 75 questions worth a total of 85 points. The exam is broken down into four (4) parts:

Part A: General Knowledge multiple-choice questions. (30 points)

Part B: A mix of multiple choice and short answer questions dealing with the application of knowledge. So far, Part B has always required students to draw a line graph. (25 points)

Part C: Short answer questions dealing with the student's ability to apply material learned in the course to real world situations. (15 points)

Part D: Multiple-choice and short answer questions pertaining to the four (4) NYS labs performed during the school year. (15 points)

New York State requires all answers to be recorded in such a way that they cannot be tampered with. As such, all answers on the test must be written in permanent pen, and mistakes may not be "scribbled out."

PLANNING THE FOUR-SESSION REGENTS PREP CLASS

For use with students who already have a good understanding of the content, but need to refresh their memories about the units learned earlier in the year, along with learning the test-taking skills needed for the Living Environment (Biology) Regents Exam.

PREPARATION

Preview the materials to see what makes the most sense for your space and amount of time.

Ask students and their teachers which topics they need to review. Use these topics to prioritize the Content Review Lesson topics for the Four-Session Regents Prep class.

Watch the YouTube video "Living Environment Regents Review Overview" for background knowledge about the exam and what students need to know about taking the exam. Below is the first link in the Instructional Resource, "Useful Web Links for Living Environment (Biology)."

(7 minutes, 23 seconds)

https://www.youtube.com/watch?v=cpnTHQeHeWk&list=PLA6278A704BCEF864

Watch the YouTube video, "The Part D required lab review," for background knowledge about the lab section of the exam. This is the second link in the Instructional Resource, "Useful Web Links for Living Environment (Biology)." (6 minutes, 30 seconds)

https://www.youtube.com/watch?v=woA0R5Eyxpk

FIRST SESSION

Introduction: Share the "Living Environment Regents Review Overview" YouTube video with students, (7 minutes, 23 seconds)

• If Wi-Fi is not available, you can summarize for students and give them the YouTube name to search for and watch on their own

Start the Content, Lab, and Test-Taking Review described for every Session.

EVERY SESSION

<u>Instruction</u>

Content Review Lessons: Use one Content Review Lesson to provide a framework for the content for each session. Prioritize the topics identified by the students and teachers as

needing review. *New July 2021:* The Content Review Lessons are available in English and Spanish.

Note: Both the Content Review Lessons and Power Point emphasize that Ecology is the most important part of the exam.

Using the "What You Absolutely Need to Know to Pass the NYS Living
 Environment Regents Exam" Power Point can give the students a focus point
 and a different media from the handouts. Topic 8: Ecology section (slides 157 178), is particularly helpful as it defines the terms listed in the Content Review
 Lessons.

Permission to Post the Power Point on this website:

Thank you to Michael Dunleavy who wrote the outline for, "What You Absolutely Must Know to Pass the NYS Living Environment/Biology Regents.

Thank you to Danielle Chase & Denise Johnson who put it into the Power Point presentation.

Note: Many of the Power Point slides and Content Review lesson handouts, that we have, match well for content and the order of presentation, so they can be used together. Some are different. See the comparison below to decide when you want to use the Power Point to support the Content Lesson Review handouts.

Slide Numbers	Power Point	Comparison to the Content Review Lesson
1-3	Introduction: About the	
	Exam	
4-21		Unit 1 – Science and Environment
	Topic 1: The Scientific Method	The content seems to match. The presentation
		order is slightly different, with the graphing
		information is at the end of this Power Point
		section.
22-42		Unit 2 – Characteristics of Living Things
	Topic 2: The Chemistry of	The presentation order is very different from the
	Living Things	handout, making it difficult to follow along with the
		Content Review Lesson.
43-54	Topic 3: The Cell	Page 6 of Unit 2 – The Power Point is longer, with
		more vocabulary.

55-65	Topic 4: Nutrition, Photosynthesis and Respiration	Pages 3 and 4 of Unit 2 – The order and content seems to match well.
66-96	Topic 5: The Human Body	Unit 3 – Homeostasis & The Human Body The content seems to match well, except that the Power Point has a lot more about cells than the Content Review lesson handout.
97-112	Topic 6: Reproduction	Unit 4 – Reproduction – The content and presentation order seem to match well until Fertilization and Development of the fetus. The Power Point goes into a lot more detail.
113-133	Topic 6: Genetics	Unit 5 – Genetics – The content and presentation order seem to match well. The Power Point has slightly more vocabulary than the Content Review Lesson.
134-156	Topic 7: Evolution	Unit 6 – Evolution – the Power Point has a very different order and goes into more detail than the handout.
157-178	Topic 8: Ecology	Unit 7 – Ecology – The content and presentation match well. The Power Point is better for facilitators who are not science teachers. The Content Review Lesson lists a number of terms, without the definitions, that the student should know. This Power Point provides those definitions.

Useful Web Links for Living Environment (Biology): If the location has Wi-Fi access, select a YouTube video from, "Useful Web Links for Living Environment (Biology)" to review a different topic.

Note: If Wi-Fi is not available, give students the link or search information to watch when they do have access to Wi-Fi.

Lab Review: Review one Lab per session. (There are four.) To review the content, use **Living Environment Part D Review**. There is a handout and matching Power Point for each lab.

Test-Taking Practice

Focus on how to read the questions accurately and how to evaluate charts, with the practice exam resource, *Part B-2 and C Practice Exam*. These are questions from past Regents exams.

• Try different questions each session and check responses together with the Answer Key.

• Change it up one session, by using the most recent *Past Regents Exam*, to practice some questions from each testing section. The Past Regents Exams are available in both English and Spanish, but the answer key is only in English.

Use the **Part D Practice Exam** and answer key to practice some lab questions each session.

LAST SESSION

Start with the YouTube video with students, "The Part D Required Lab Review." This is a reminder about what students need to know about the labs. This link is the first link in the Instructional Resource, "Use Web Links for Living Environment (Biology)." (6 minutes, 30 seconds)

• If Wi-Fi is not available, summarize for students and give students the video name to search for and watch on their own

Then continue with the "Every Session" routine.

PLANNING THE TWELVE-SESSION REGENTS PREP CLASS

For use with students who need to spend time learning the content, as well as to become familiar with the test-taking skills specific to Living Environment (Biology).

PREPARATION

Preview the materials to see what makes the most sense for your space and amount of time, including the bilingual glossaries. The link is provided on the handout of *Useful Web Links*.

Watch the YouTube video "Living Environment Regents Review Overview" for background knowledge about the exam and what students need to know about taking the exam. This is the first link in the Instructional Resource, "Useful Web Links for Living Environment (Biology)." (7 minutes, 23 seconds)

https://www.youtube.com/watch?v=cpnTHQeHeWk&list=PLA6278A704BCEF864

Watch the YouTube video, "The Part D required lab review," for background knowledge about the lab section of the exam. This is the second link in the Instructional Resource, "Useful Web Links for Living Environment (Biology)." (6 minutes, 30 seconds)

https://www.youtube.com/watch?v=woA0R5Eyxpk

FIRST SESSION

Introduction: Share the YouTube video with students, "Living Environment Regents Review Overview." (7 minutes, 23 seconds)

• If Wi-Fi is not available, you can summarize for students and give them the YouTube name to search for and watch on their own

Start the content review and test-taking practice described for Sessions 1-8.

SESSIONS 1-8

Instruction

Content Review lessons: Use the Content Review lessons to provide a framework for the content for each session. The lessons review vocabulary and test-taking tips for each unit. Focus on one unit per session. **New July 2021:** The Content Review Lessons are available in English and Spanish.

Power Point: Use the "What You Absolutely Need to Know to Pass the NYS Living Environment Regents Exam" Power Point resource with the Content Review Lessons.

- o Both the Content Review Lessons and Power Point emphasize that Ecology is the most important part of the exam.
- Using the "What You Absolutely Need to Know to Pass the NYS Living Environment Regents Exam" Power Point can give the students a focus point and a different media from the handouts. Topic 8: Ecology section (slides 157-178), is particularly helpful as it defines the terms listed in the Content Review Lessons.

Permission to Post the Power Point on this website:

Thank you to Michael Dunleavy who wrote the outline for, "What You Absolutely Must Know to Pass the NYS Living Environment/Biology Regents.

Thank you to Danielle Chase & Denise Johnson who put it into the Power Point presentation.

Note: Many of the Power Point slides and Content Review lesson handouts, that we have, match well for content and the order of presentation, so they can be used together. Some are different. See the comparison below to decide when you want to use the Power Point to support the Content Lesson Review handouts.

Slide	Danier Daint	Commercian to the Content Parism Lesson	
Numbers	Power Point	Comparison to the Content Review Lesson	

1-3	Introduction: About the Exam	
	Topic 1: The Scientific Method	Unit 1 – Science and Environment
		The content seems to match. The presentation
4-21		order is slightly different, with the graphing
		information is at the end of this Power Point
		section.
	Topic 2: The Chemistry of Living Things	Unit 2 – Characteristics of Living Things
22-42		The presentation order is very different from the
22-42		handout, making it difficult to follow along with the
		Content Review Lesson.
43-54	Topic 3: The Cell	Page 6 of Unit 2 – The Power Point is longer, with
45-54		more vocabulary.
	Topic 4: Nutrition,	Pages 3 and 4 of Unit 2 – The order and content
55-65	Photosynthesis and	seems to match well.
	Respiration	
		Unit 3 – Homeostasis & The Human Body
66-96	Topic 5: The Human Body	The content seems to match well, except that the
00 30	Topic 3. The Human Body	Power Point has a lot more about cells than the
		Content Review lesson handout.
	Topic 6: Reproduction	Unit 4 – Reproduction – The content and
97-112		presentation order seem to match well until
3, 112		Fertilization and Development of the fetus. The
		Power Point goes into a lot more detail.
	Topic 6: Genetics	Unit 5 – Genetics – The content and presentation
113-133		order seem to match well. The Power Point has
		slightly more vocabulary than the Content Review
		Lesson.
	Topic 7: Evolution	Unit 6 – Evolution – the Power Point has a very
134-156		different order and goes into more detail than the
		handout.
157-178	Topic 8: Ecology	Unit 7 – Ecology – The content and presentation
		match well. The Power Point is better for facilitators
		who are not science teachers. The Content Review
		Lesson lists a number of terms, without the
		definitions, that the student should know. This
		Power Point provides those definitions.

Useful Web Links for Living Environment (Biology) -Look for a related YouTube video, from the instructional resource, "Useful Web Links for Living Environment (Biology)."

Test-Taking Practice

Select problems from the practice exam resource, *Part A and Part B-1 Practice Exam* for the matching focus unit (1-7) for the session, to practice answering multiple-choice questions related to the unit, then check together with the answer key.

Each session, answer at least one question from the practice exam resource, *Part B-2 and C Practice Exam* and check using the answer key.

WHEN THERE ARE FOUR SESSIONS REMAINING

Change the main focus of the sessions from reviewing the content to test-taking skills to reviewing the labs from the year and spend more time with the constructed responses in the Part B-2 and C Practice Exams.

Instruction – Lab Review

YouTube video, "The Part D Required Lab Review." Use the first link in the Instructional Resource, "Use Web Links for Living Environment (Biology)," to give a broad review about the Labs. (6 minutes, 30 seconds)

• If Wi-Fi is not available, summarize for students and give students the video name to search for and watch on their own.

Living Environment Part D Review - Review one each of the four (4) Labs per remaining four (4) session.

- Use the instructional resources for *Living Environment Part D Review*. There is a handout and Power Point for each lab.
- Answer some questions each session about the labs with, Part D Practice Exam. Use the Answer Key to review with students

Test-Taking Practice

Focus on how to read the questions accurately and how to evaluate charts, with the remaining problems in the practice exam resource, *Part B-2 and C Practice Exam*. These are questions from past Regents exams.

- Try different questions each session and check responses together with the Answer Key.
- Change it up one session, by using the most recent *Past Regents Exam*, to practice some
 questions from each testing section. The Past Regents Exams are available in both
 English and Spanish, but the answer key is only in English.

DESCRIPTION OF RESOURCES FOR REGENTS PREP: LIVING ENVIRONMENT (BIOLOGY) RESOURCES

Located on the NYS MEP website www.nysmigrant.org
Select >Resources, >Library
and scroll to "Regents Prep: Living Environment (Biology)

I. LIVING ENVIRONMENT INSTRUCTIONAL RESOURCES

Facilitator Guide

Content Review Lessons – Basic information to study connected to seven (7) Units of Study and four (4) State Labs. *New July 2021:* The Content Review Lessons are available in English and Spanish.

Unit 1: Science and the Living Environment

Unit 2: Characteristics of Living Things

Unit 3: Homeostasis and the Human Body

Unit 4: Reproduction

Unit 5: Genetics
Unit 6: Evolution
Unit 7: Ecology

APPENDIX: State Labs

• **Useful Web Links for Living Environment (Biology):** This is a list of website resources and the links to get there. Many are short videos.

Vocabulary

- Handout: Living Environment Core Vocabulary List English
- Link to all of New York's academic Bilingual Glossaries
 - Scroll down to "Science," then "High School Living Environment (Biology). Once there, click on the language you want. The languages currently include Burmese, Haitian, Karen, Nepali, Spanish, and Swahili. https://steinhardt.nyu.edu/metrocenter/resources/glossaries
- Note: "English Language Learners may use bilingual glossaries when taking State examinations in all subjects except foreign languages. The bilingual dictionaries and glossaries may provide only direct one to one translations of words.
 Bilingual dictionaries and/or glossaries that provide definitions or explanations are not permitted."

http://www.nysed.gov/bilingual-ed/english-language-learnermultilingual-learner-assessment-testing-accommodations

• **Living Environment Part D Review**: There is a handout and Power Point to reinforce information learned from each of the four (4) State Labs.

1. Making Connections

Handout

Power Point

2. Relationships and Diversity

Handout

Power Point

3. Beaks of Finches

Handout

Power Point

4. Diffusion Through a Membrane

Handout

Power Point

- Power Point: What You Absolutely Need to Know to Pass the NYS Living Environment Regents Exam: This Power Point provides tips for taking the Regents exam in context with the vocabulary for each content unit.
 - o Both the Content Review Lessons and Power Point emphasize that Ecology is the most important part of the exam.
 - O Using the "What You Absolutely Need to Know to Pass the NYS Living Environment Regents Exam" Power Point with the Content Review Lessons can give the students a focus point and a different media from the handouts. Topic 8: Ecology section (slides 157-178), is particularly helpful as it defines the terms listed in the Content Review Lessons. The Facilitator Guide details how to coordinate the unit lessons.

Permission to Post the Power Point on this website:

Thank you to Michael Dunleavy who wrote the outline for, "What You Absolutely Must Know to Pass the NYS Living Environment/Biology Regents.

Thank you to Danielle Chase & Denise Johnson who put it into the Power Point presentation.

II. LIVING ENVIRONMENT PRACTICE EXAMS

The Practice Exams are organized by the different sections of the Living Environment Regents Exam. Different sections require different test-taking skills.

Part A and B-1 – Students need to answer Multiple questions. There is a Practice Exam
for each unit of study. Each of these has an answer key.

Unit 1 - Science & the Living Environment

Practice Exam

Answers

Unit 2 – Characteristics of Living Things

Practice Exam

Answers

Unit 3 – Homeostasis & the Human Body

Practice Exam

Answers

Unit 4 - Reproduction

Practice Exam

Answers

Unit 5 - Genetics

Practice Exam

Answers

Unit 6 - Evolution

Practice Exam

Answers

Unit 7 - Ecology

Practice Exam

Answers

• Part B-2 and C – Students need to read a short article or diagram and answer questions that are a mixture of multiple choice, short answer and essay.

Practice Exam

Answers

• **Part D** – Practice questions related to the State Labs. Students need to read short articles and diagrams then respond through a mixture of multiple choice, short answer and essay.

Practice Exam

Answers

III. Living Environment Past Regents Exams – This list of exams will be updated periodically with the three most recent Living Environment (Biology) Regents Exams released for public use.

July 2021 Update: The Answer Keys provide the correct answer for the multiple choice questions. The Rating Guide provides guidance about what should be in the constructed responses. The Answer Key and Rating Guide are only in English.

a. January 2020

Student Exam – English Student Exam – Spanish Answer Key Rating Guide

b. August 2019

Student Exam – English Student Exam – Spanish Answer Key Rating Guide

c. June 2019

Student Exam – English Student Exam – Spanish Answer Key Rating Guide