

# Biology SBA Prep Practice and Review Materials

These review materials have been compiled to assist students as they review for the NM-SBA and other biology exams. Obviously, you will not have time to watch every video, perform every simulation, and take every online quiz. Here are the recommended ways to use this information:

- If you **have taken or are currently taking biology**, then review only those topics in which you feel weakest.
- If you **have not had biology in high school**, you should know that there are a number of biology questions on the NM-SBA and it is in your best interest to prepare for them.
  - Begin by taking one or more of the quizzes for each topic.
  - If you score < 60% then it is recommended that you watch the videos and/or do the simulations.
  - Retake the quiz
- After you are finished reviewing, then take the SBA Biology Prep Quiz.
- If any of the links do not work, please let your science teacher know.
- Good luck on the exam!

Biology			
Topic	Video	Simulation	Online Quiz
<b>Proteins</b>	<a href="#">Basic Protein Structure Video. Ricochet Science</a> (2:16)  <a href="#">3D Protein Structure Video. RCSB Protein Data Bank.</a> (3:38)  <a href="#">Enzyme Structure and Function Video. UW Madison Intro Bio.</a> (4:22)	<a href="#">Enzyme Animation and Quiz. McGraw Hill</a>	<a href="#">Proteins Quiz. Soft Schools</a>  <a href="#">Enzymes Quiz. Science Geek</a>

# Biology

Topic	Video	Simulation	Online Quiz
<b>DNA</b>		<a href="#">DNA Structure. McGraw Hill Animation and Quiz</a>  <a href="#">DNA Game. Nobel Prize.org</a>	<a href="#">DNA Structure Online Quiz. The Biology Corner</a> <a href="#">5</a>
<b>ATP</b>	<a href="#">The ATP Cycle. Ricochet Science</a> (1:55)		
<b>Cell Structure</b>	<a href="#">Cells. (7:21)</a>  <a href="#">Animal Cells. Crash Course Video</a> (11:34)  <a href="#">Plant Cells. Crash Course Video</a> (10:27)  <a href="#">Membranes. Crash Course Biology Video</a> (11:44)	<a href="#">Plant vs Animal Cell. SEPUP</a>  <a href="#">Cell Membranes. PhET</a> (requires Java)	<a href="#">Organelles Quiz. The Biology Corner</a>  <a href="#">Sheppards Software Quiz</a>
<b>Cell Function: Photosynthesis</b>	<a href="#">Photosynthesis Quick overview</a> (6:20)  <a href="#">Photosynthesis. Explanation. Bozeman Science</a> (12:26)  <a href="#">Photosynthesis. Crash Course Biology</a> (13:14)	<a href="#">Photosynthesis and Respiration Activities and Quizzes. Bioman</a>	<a href="#">BBC. GCSE Bitesize Quiz</a>  <a href="#">Science Geek Photosynthesis Quiz</a>

# Biology

Topic	Video	Simulation	Online Quiz
<b>Cell Function: Cellular Respiration</b>	<p><a href="#">Anaerobic Respiration (fermentation) vs Aerobic Respiration Video</a> (2:50)</p> <p><a href="#">Anaerobic Respiration (fermentation) vs Aerobic Respiration. BBC GCSE Video</a> (4:13)</p> <p><a href="#">Cellular Respiration. Crash Course Biology Video</a> (13:25)</p> <p><a href="#">Cellular Respiration. Explanation. Bozeman Science</a> (14:13)</p>	<p><a href="#">Cellular Respiration Interactive. Sinaur</a></p> <p><a href="#">Cellular Respiration Interactive. Pearson</a></p>	<p><a href="#">Science Geek. Fermentation and Cellular Respiration Quiz</a></p>
<b>Cell Function: DNA Replication</b>	<p><a href="#">DNA Replication. Crash Course Biology</a> (12:58)</p>	<p><a href="#">McGraw Hill Animation and Quiz</a></p>	<p><a href="#">DNA Replication Online Quiz. The Biology Corner</a></p>
<b>Cell Function: Mitosis</b>	<p><a href="#">Mitosis. Crash Course Biology</a> (10:47)</p>	<p><a href="#">Mitosis. Interactive. Sinaur</a></p> <p><a href="#">Mitosis. PBS Learning Media Interactive</a></p> <p><a href="#">Mitosis. McGraw Hill Animation</a></p> <p><a href="#">Mitosis. Game the Cell Cycle</a></p>	<p><a href="#">Mitosis Online Quiz. The Biology Corner</a></p>

# Biology

Topic	Video	Simulation	Online Quiz
<b>Cell Function: Meiosis</b>	<a href="#">Meiosis. Crash Course Biology (11:42)</a>	<a href="#">Meiosis Interactive. Sinaur</a>  <a href="#">Mitosis vs Meiosis. PBS Learning Media Interactive</a>	<a href="#">Meiosis Online Quiz. The Biology Corner</a>
<b>Cell Function: Protein Synthesis (Transcription and Translation)</b>	<a href="#">Transcription and Translation Video. Crash Course Biology</a>  <a href="#">Transcription and Translation Video. SEPUP</a>	<a href="#">Transcription and Translation Animation. PBS Learning Media</a>  <a href="#">Translation McGraw Hill Animation and Quiz</a>  <a href="#">Gene Regulation. The Basics. PhET (requires Java)</a>	<a href="#">Transcription and Translation Online Quiz. The Biology Corner 2</a>  <a href="#">Transcription and Translation Online Quiz. The Biology Corner 3</a>
<b>Genetics</b>	<a href="#">Heredity. Crash Course Biology Video (10:17)</a>  <a href="#">Beginner's Guide to Punnett Squares. Bozeman Science Video (12:14)</a>  <a href="#">Genetics. Bozeman Science Video (11:45)</a>	<a href="#">Punnett Squares. PBS Media Interactive</a>  <a href="#">Punnett Squares. Sinaur</a>	<a href="#">Mendelian Genetics Online Quiz. Palomar</a>  <a href="#">Mendelian Genetics Quiz. The Biology Corner</a>  <a href="#">Genetics Quiz. Bioman</a>

# Biology

Topic	Video	Simulation	Online Quiz
<p><b>Evolution</b></p>	<p><a href="#">Speciation. Crash Course Biology Video (10:24)</a></p> <p><a href="#">Evidence for Evolution. Bozeman Science Video (9:22)</a></p> <p><a href="#">Natural selection. Crash Course Biology Video (12:44)</a></p>	<p><a href="#">PhET. Natural Selection Model (requires Java)</a></p>	<p><a href="#">Evolution Online Quiz. Palomar</a></p> <p><a href="#">Evolution Online Quiz. ProProfs</a></p> <p><a href="#">Evolution Online Quiz. The Biology Corner</a></p> <p><a href="#">Evolution Online Quiz. The Biology Corner 2</a></p> <p><a href="#">Evolution Online Quiz. Glencoe</a></p>
<p><b>Ecology</b></p>	<p><a href="#">Introduction to Ecology. Crash Course Biology Video (10:25)</a></p> <p><a href="#">Introduction to Ecology. Bozeman Science Biology (13:41)</a></p> <p><a href="#">Biogeochemical Cycling. Bozeman Science Biology (10:06)</a></p> <p><a href="#">Ecosystem Change. Bozeman Science Biology (12:18)</a></p> <p><a href="#">Population Ecology. Crash Course Ecology Video (11:52)</a></p>	<p><a href="#">Model Ecosystems. Biology Virtual Labs</a></p> <p><a href="#">Population Biology. The Biology Corner. Virtual Lab</a></p>	<p><a href="#">Ecology and Biomes Quiz. The Biology Corner</a></p> <p><a href="#">Population Quiz. The Biology Corner</a></p>


# Biology

Topic	Video	Simulation	Online Quiz
	<p><a href="#">Human Population Growth. Crash Course Ecology Video</a> (10:53)</p> <p><a href="#">Logistic Population Growth. Bozeman Science Biology</a> (10:55)</p> <p><a href="#">Community Ecology 2. Predation. Crash Course Ecology</a> (10:22)</p> <p><a href="#">Competition, Predation, and Symbiosis (and Succession). Great Pacific Media</a> (3:20)</p>		

## Ready to take the SBA prep Biology quiz?

- Do your best.
- Be sure to answer the constructed response questions.
- When you are finished, be sure to check your answers to see which areas you need to study more.
- Be sure to let your teacher know that you took it so they can give you some feedback.

- Here is the link:

<b>Biology</b>	<a href="http://bit.ly/2IWuC5R">http://bit.ly/2IWuC5R</a>	
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