

# AP BIOLOGY BOOK STUDY

## *Survival of the Sickest* by Dr. Sharon Moalem

Due Date: \_\_\_\_\_

The AP Framework requires that:

- The course provides students with opportunities to connect their biological and scientific knowledge to major social issues (e.g., concerns, technological advances, innovations) to help them become scientifically literate citizens. (CR5)
- The course provides opportunities for students to develop and record evidence of their verbal, written and graphic communication skills through laboratory reports, summaries of literature or scientific investigations, and oral, written, or graphic presentations. (CR8)

For this book project, you will read *Survival of the Sickest* and maintain a dynamic journal that summarizes main ideas, asks questions, integrates personal reflections, and identifies quotes and concepts that connect to the 4 Big Ideas in AP Biology. You will also create a 3D model that relates to a main idea/concept from one of the chapters. Your model should connect the book to one of the four Big Ideas. The four Big Ideas in AP Biology are:

- **Big Idea 1:** The process of evolution drives the diversity and unity of life.
- **Big Idea 2:** Biological systems use energy and molecular building blocks to grow, reproduce and maintain dynamic homeostasis.
- **Big Idea 3:** Living systems store, retrieve, transmit and respond to information essential to life processes.
- **Big Idea 4:** Biological systems interact, and these systems and their interactions exhibit complex properties.

### Dynamic Journal Requirements:

For EACH CHAPTER:

1. 1-2 paragraphs that summarize the main ideas/concepts from the chapter.
  - a. Use proper spelling, grammar, and sentence structure.
  - b. Neatly written (in ink) OR typed (12 pt font, left aligned, single-spaced).
  - c. Be organized – use headings, appropriate spacing and paragraph breaks
  - d. Clearly state the key concepts/ideas
2. Find **1 quote** that relates to **each of the four Big Ideas**. Then explain or discuss how that quote connects the big idea.
  - a. Be thorough.
  - b. Give the page number where your quote can be found.
  - c. Support your claim with evidence from the book or class.
3. 1-2 personal questions, experiences, connections, **or** concerns that arise from reading the chapter.
4. At least one specific thing that you learned or found interesting from each chapter. This may NOT be a repeat of anything stated from criteria 1-3 above. You must cite the page number. This does not have to be a quote.
5. Be organized.

### 3D Model Requirements:

- Student generated (not store bought)
- 3 dimensional (no flat posters)
- Shows evidence of thought and time
- Creative, neat and well made
- Includes a short (1-2 paragraph) explanation of:
  - WHY you chose to create this model
  - HOW the model relates to the book
  - HOW the model relates to one of the 4 Big Ideas
  - Describe/explain what the model is showing (concept, book reference, representations, etc)
- Present your 3D model to the class (or small group)

# AP BIOLOGY BOOK STUDY GRADING RUBRIC

DUE DATE: \_\_\_\_\_

Name: \_\_\_\_\_

Block: \_\_\_\_\_

PROJECT COMPONENT	CRITERIA	POINTS POSSIBLE	POINTS EARNED
<b>Dynamic Journal</b>	Organized <ul style="list-style-type: none"> <li>• Big Idea Headings</li> <li>• Breaks between headings</li> <li>• Clear indication of what the Big Ideas are</li> </ul>	10	0 5 10
	Aesthetics & Grammar <ul style="list-style-type: none"> <li>• ink or typed</li> <li>• single spaced</li> <li>• Proper sentence structure and punctuation</li> <li>• Minimal spelling errors</li> </ul>	10	0 5 10
	Includes 8 summaries (1 per chapter) <ul style="list-style-type: none"> <li>• Summaries are succinct (1-2 paragraphs per) (8)</li> <li>• Paragraphs are at least 5 sentences long (8)</li> <li>• Summaries clearly state main ideas (8)</li> </ul>	24	
	32 Quotes: <ul style="list-style-type: none"> <li>• 4 quotes per chapter (32)                             <ul style="list-style-type: none"> <li>◦ 1 per Big Idea – clearly identified</li> </ul> </li> <li>• Page # included for all quotes (32)</li> <li>• <b>Thorough and correct explanation or connection to each big idea (32)</b></li> </ul>	96	
	Min. of 8 Personal connections, questions, or concerns	8	
	8 specific things learned or found interesting with page # cited (does not have to be a quote)	16	
<b>Journal Total Points:</b>		<b>164</b>	
<b>3D Model</b>	Student generated (not store bought)	5	0 5
	3 dimensional (no flat posters)	5	0 5
	Shows evidence of thought and time	20	0 5 10 15 20
	Creative, neat and well made	20	0 5 10 15 20
	Accurate depiction of content	10	0 5 10
	1-2 Paragraphs: <ul style="list-style-type: none"> <li>◦ Describe/explain what the model is showing (concept, book reference, representations, etc) (5)</li> <li>◦ WHY you chose to create this model (5)</li> <li>◦ HOW the model relates to the book (5)</li> <li>◦ HOW the model relates to one of the 4 Big Ideas (5)</li> </ul>	20	0 5 10 15 20
	Presentation of 3D model to class or group	6	0 3 6
<b>3D Model Total Points:</b>		<b>86</b>	
<b>OVERALL SCORE</b>		<b>250</b>	