

# COGNITIVE COMIC INSTRUCTIONS

## Overview

Your group will research an organism (animal, plant, fungus, protist, or bacterium) and reflect on how natural selection has affected its species. You will use this information to create your own comic strip about the organism and how this trait increases its “fitness.”

## Comic Strip Requirements

- Six (6) frames
- At least four (4) frames illustrated in color, beyond just black and white
- **Captions:** For each frame, write a caption with a maximum of two (2) sentences (speech bubbles are okay, but not preferred).
- **Summary:** At the bottom or on the back of your paper, include a paragraph that explains the organism’s trait you chose to illustrate, as well as how your comic strip addresses “survival of the fittest” and what “fitness” means in that context.

## Required Points of Natural Selection to Illustrate

- There are variations (differences) in a population.
- Some variations are favored over others.
- Not all young produced will survive.
- Organisms that do survive and reproduce are those with the favored trait.

## Comic Strip Brainstorming

Using the table on the next page, brainstorm ideas to create an outline for your comic strip. Don’t forget to cite the source(s) where you found the information about your organism!

*Natural Selection Comic Strip Brainstorming*

Frame 1	Frame 2	Frame 3
<b>Illustration:</b>	<b>Illustration:</b>	<b>Illustration:</b>
<b>Caption:</b>	<b>Caption:</b>	<b>Caption:</b>
Frame 4	Frame 5	Frame 6
<b>Illustration:</b>	<b>Illustration:</b>	<b>Illustration:</b>
<b>Caption:</b>	<b>Caption:</b>	<b>Caption:</b>
<b>Citation(s):</b>		

Natural Selection Comic Strip Rubric					
Description of Criterion	Exceeds	Meets	Approaching	Needs Improvement	No Mark
<b>Facts</b>	Facts were accurate for all events reported in the comic. Included additional facts beyond the requirement.	Facts were accurate for all events reported in the comic.	Facts were accurate for at least 80% of the events reported in the comic.	Facts were accurate for at least 60% of the events reported in the comic.	Incomplete /Missing
<b>Depth of Coverage/ Knowledge</b>	Shows a solid grasp of all content covered. Extensions of the key ideas show a deep understanding of content.	Shows a solid grasp of most of the content. Shows extensions of most key ideas.	Shows a basic level of coverage of key ideas only. Attempts extension of a few ideas.	Shows the bare minimum of content covered. No extension of ideas evident.	Incomplete /Missing
<b>Learning of Content</b>	Accurately depicts 100% of the natural selection points and one or more than one environmental event that led to organism's selection pattern.	Accurately depicts 100% of the natural selection points and an environmental event that led to organism's selection pattern.	Accurately depicts 75% of the natural selection points and an environmental event that led to organism's selection pattern.	Accurately depicts 50% of the natural selection points and an environmental event that led to organism's selection pattern.	Incomplete /Missing
<b>Resources</b>	Cites additional appropriate resources beyond the requirement that are relevant to the topic.	Cites an appropriate resource as required that is relevant to the topic.	Cites a resource that is mostly relevant to the topic.	Cites a resource with little to no relevance to the topic.	Incomplete /Missing

Adapted from Swestyani, S., et al. (2018). An analysis of logical thinking using mind mapping [Figure 1]. *Journal of Physics Conference Series*. <https://iopscience.iop.org/article/10.1088/1742-6596/1022/1/012020/pdf>