

Name: _____ Hour: _____

Charles Darwin's Game of Survival

Directions:

1. Access the internet and search "Charles Darwin's Game of Survival". Click on the first link – it should be a science channel link.
 - a. ***If the game does not load*** – open a new tab, and type **chrome://settings/content**. On the content settings scree, find the flash player listing. Select "**Allow Sites to Run Flash**" then click done. Go back to the game and refresh the page. The game should load. Click on "**Learn about Natural Selection**" and answer the following questions in complete sentences
 - b. ***If the game does load*** – click on "**Learn about Natural Selection**" and answer the following questions in complete sentences
2. Learn About Natural Selection
 - a. Does every species exhibit variation or are they exactly the same? Explain.
 - b. What types of variations are frequently exhibited in a population or species? Explain.
 - c. Explain how traits are passed on.
 - d. Explain what "survival of the fittest" means.
 - e. If an organism is _____ with _____ that will help it _____ or _____, it will likely produce more offspring that rivals without those traits. Eventually _____ traits can spread throughout a species.
3. Play the Survival Game "Who Wants to Live a Million Years?" on the **back on this worksheet**.
4. After the survival game, click on the tab "**Darwin's Bio**" and read the short excerpt about Darwin. Then click on "**Quiz**" and answer the following question sin the quiz and write your responses on this paper.
 - a. In the first part of the explanation for Darwin's theory of natural selection, every species exhibits what?
 - b. Natural selection is only one process of evolution. What is another process that can cause change in a species over time?
 - c. A species of organism has survived in a mild environment for thousands of years. Suddenly, the climate becomes much colder. Which of the following traits might help the species survive?
 - d. Which of the following traits might be passed from parent to offspring but not necessarily be beneficial to the survival of the species?
 - e. Long Answer: Does variation of traits help or hurt a species in the long run? Justify your opinion with support from this activity and other assignments we have done in class.

3. Now you are going to play the Survival Game, **“Who Wants to Live a Million Years?”**. Read the directions at the bottom of the game, carefully, so that you pick traits for your organisms wisely. Click on **“Hints”** at the right hand side of the scree to look at the pros and cons for each choice.

	Round One	Round Two	Round Three
Trait 1	Good for:	Good for:	Good for:
Trait 2	Good for:	Good for:	Good for:
Trait 3	Good for:	Good for:	Good for:
Environment 1	What changed in the environment? What survived this environment?	What changed in the environment? What survived this environment?	What changed in the environment? What survived this environment?
Environment 2	What changed in the environment? What survived this environment?	What changed in the environment? What survived this environment?	What changed in the environment? What survived this environment?
Environment 3	What changed in the environment? What survived this environment?	What changed in the environment? What survived this environment?	What changed in the environment? What survived this environment?
Did you survive all three environments to 1,000,000 years? (yes or no)			