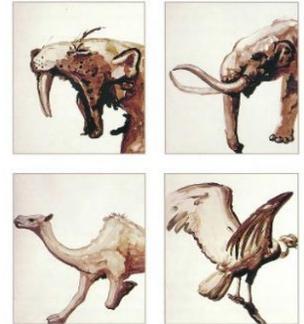


The Next Generation: Evolution in 100 Million Years

Evolution is occurring all the time, all around us. Think about the different organisms that you see every day. How do you think they will change over the next one hundred million years? You will design a poster to show your predictions for a common organism will evolve during an environmental pressure.

Directions

1. Pick an organism. Any real life organism.
2. Pick **ONE** environmental pressure from the chart below that will affect your organism.
3. Make a poster showing the evolution of your organism over the next 100 million years.
4. Write a conclusion paragraph and attach it to your poster.
5. Use the checklist to make sure you did everything completely and correctly.



Your poster must include:

1. Picture of how your organism looks now (as of today!). Label the current adaptations the organism has.
2. Picture of how the organism will look after evolving. Label the new adaptations.
 - a. Minimum of 4 changes that allow the organism to be successful in the future environment.
 - b. For each change, explain how the adaptation will allow for the organism's survival over the next 100 million years.

Your conclusion paragraph must include:

1. An explanation of how the processes of Natural Selection and Survival of the Fittest drove each change/adaptation. How was this organism able to survive the environmental pressure over 100 million years? How is this organism successful in the future?



Environmental Pressures (Pick ONE):

A. Global Warming/Climate Change:	B. Habitat Loss:	C. Food Shortage:
<ul style="list-style-type: none"> * Increased temperature * Decreased amount of drinkable water * Ocean levels rise * Change in vegetation (habitat & food) 	<ul style="list-style-type: none"> * Decreased space * Decreased food source * Harder to find a mate * Increased interactions with people 	<ul style="list-style-type: none"> * Decreased food source * Competition for food * Starvation * Need to change in diet
D. Overhunting:	E. Pollution (Ocean/Air/Land):	F. Overpopulation/Invasive Species:
<ul style="list-style-type: none"> * Harder to find a mate * Need to be better at hiding * Need to be better able to defend self * More space to move around in 	<ul style="list-style-type: none"> * Increase in organism toxicity * Decreased amount of drinkable water * Change in temperature * Change in vegetation (habitat & food loss) 	<ul style="list-style-type: none"> * Competition for food * Competition for a mate * Competition for space * Less space * Change in food availability



Project Checklist:

- Craftsmanship..... **10 points**
Neatness; color; spelling; organization; etc.
- Picture of organism (now)..... **10 points**
Labeled adaptations; in color
- Picture of organism (in the future: 100 million years) **20 points**
Labeled adaptations; in color; clearly shows minimum of 4 changes (only 1 behavioral trait)
- Change 1 **10 points**
Clear description of the change; what happened in the environment?
Detailed explanation of how it makes organism better able to survive
- Change 2 **10 points**
Clear description of the change; what happened in the environment?
Detailed explanation of how it makes organism better able to survive
- Change 3 **10 points**
Clear description of the change; what happened in the environment?
Detailed explanation of how it makes organism better able to survive
- Change 4 **10 points**
Clear description of the change; what happened in the environment?
Detailed explanation of how it makes organism better able to survive
- Conclusion Paragraph **20 points**
Clear connection to Survival of the Fittest;
Detailed explanation of how Natural Selection caused the organism to adapt to the changing environment due to the environmental pressure.

Total = 100 points

