**Evolution By Natural Selection Worksheet**

Define the following:

1. Evolution -
2. Fitness -
3. Natural selection -

*Fill in the blank using the word bank: disease, offspring, reproduce, mutations, adapted, survive, fit, variation.*

In any population there is always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are caused by random genetic \_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the DNA of organisms. Organism that are better \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_to their environment are considered more \_\_\_\_\_\_and are more likely to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Describe what is happening with these giraffes:

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| --- | --- |
| There is variation amongst the giraffes. Some are very short, some medium sized and some are tall. The trees have branches that can be reached by all giraffes.  What happens to the giraffes? |  |

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| If giraffes once had short necks, how did they evolve into long-necked giraffes? |  |
| There is a drought and the lower branches of the trees die off and the short giraffes cannot reach the branches higher up? What will happen to the short giraffes?  What will happen to the tall giraffes? |  |
| There are only tall and medium sized giraffes left and they breed together.  What size would their offspring be?  What will happen to the short genes in the population? |  |

What will happen to the population of giraffes when the water comes back and the trees grow branches all over again?

At the watering hole, lions prey on the tall giraffes as they are slower to run away. How will this affect the population of the giraffes?

