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| **Cornell Notes** | **Topic/Objective: Natural Selection VS. Selective**  | **Name:** |
| **Breeding** | **Class/Period:** |
|  | **Date:** |
| **Essential Question: What is natural selection and how is it related to adaptations?**  |
| **Questions:** | **Notes:** |
| What are natural changes? | -There are two \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces that could \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a population  |
|  | over \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  |
|  | * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ selection
 |
|  | * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ selection
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| What is **sexual selection**? | - changes a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because mates are \_\_\_\_\_\_\_\_\_\_\_\_\_ about who they will mate with |
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| Why do mates with certain  |  |
| traits have a higher chance |  |
| of reproducing?  |  |
|  |  |
| What is **natural** **selection**? | - A process where \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ organisms that have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |
|  | **adaptations** will \_\_\_\_\_\_\_\_\_\_\_\_\_ longer and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ more, which \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |
|  | on those \_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
|  |  |
|  | Organisms with \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ traits will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and there traits  |
|  | become \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ common. |
|  |  |
| How can you sum natural  | Natural selection changes a population because “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |
| Selection up? | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.” |
|  |  |
| How can species adapt to  | * **Difference modes of transportation**: Animals may \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_from predators
 |
| To protect themselves?  | by being able to \_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ away. |
|  | * Animals that can’t run, fly, or swim fast enough to get away, have come up with
 |
|  | other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ . |
|  | * **Mimicry**: when \_\_\_\_\_\_\_\_\_\_\_\_ animal looks like a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ animal.
 |
|  |  Batesian (a good prey item looks like a bad one)Mullerian (bad prey items look like each other.) |
|  | Types of mimicry: |
|  |  |
|  |
| **Questions:** | **Notes:** |
|  | * **Protection:** Some animals develop *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*to defend themselves, having a
 |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or live together in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |
|  | schools, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | * **Camouflage**: helps animals \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in with their
 |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
|  |  |
| What are manmade  | People change populations for many different reasons, in these ways: |
| changes? | * Artificial \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mutation, genetic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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|  |  |
| What is selective breeding? | - Breeding \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ traits in order to \_\_\_\_\_\_\_\_\_\_\_\_ a population |
|  |  |
| How is selective breeding  | - Artificial selection is a \_\_\_\_\_\_\_\_\_\_\_\_\_ of\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ breeding, where  |
| and artificial selection  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_change populations by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that they want to  |
| linked? | \_\_\_\_\_\_\_\_\_\_\_\_\_ on to the next \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
|  |  |
| How is selective breeding  | - \_\_\_\_\_\_\_\_\_\_\_\_\_\_ two of the \_\_\_\_\_\_\_\_\_\_\_\_type of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that have a desired trait |
| used? | - cross two \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_types of individuals to get \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ desired traits |
|  |  |
| What is induced mutation? | - When \_\_\_\_\_\_\_\_\_\_\_\_\_\_ create \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by using \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
|  | Ex. To get seedless fruits or hairless animals.  |
|  |  |
| What is genetic  | - When humans \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ some of the \_\_\_\_\_\_\_\_\_\_\_ from one \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into  |
| engineering? | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ organism |
|  | Ex. To get Fungal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_wheat or rice \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with Vitamin A |
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| **Summary:** |
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