|  |  |
| --- | --- |
| Science 9 | Unit A |
| Lesson 5: Hertitable v. Non-Heritable | 84 mins |

Board Niche vs. Narrow Niche

|  |  |
| --- | --- |
| Board Niche – organism that is able to live in a wider ecosystem. Narrow Niche – Organism that can live in a smaller areaDraw a graph populations over time | Greater Chance of survival, Less Species in an AreaSmaller chance of survival outside of it’s ecosystem, but more species can live together. |

Inheritable vs. Non-inheritable

|  |  |
| --- | --- |
| *QUESTION: Give an example of a non-physical variation in a species.*Human Variation BINGO[www.edquest.ca/component/content/article/25/](http://www.edquest.ca/component/content/article/25/)Inherited (heritable) – Characteristics that are passed on to offspring directly from parents.Non-inherited – Characteristics that are acquired and not necessarily passed on from generation to generation  | Vertical Lines, X, C, O, FullExamples: Eye Colour, Hair Type, Skin Colour, EarlobesExamples: Athleticism, Artistic ability, leadership qualities are all learned during the early years of life |

Discrete and Continuous Variations

|  |  |
| --- | --- |
| Discrete – differences in characteristics that have a definite formContinuous – differences in characteristics that have a range of forms | Examples: Hair colour, earlobes, Examples: Height, Foot size |

ACTIVITY:

* Have the class clasp their hands above their head and then bring it down and see which thumb is on top.
* Have students line up by foot size.

Environmental Influences

|  |  |
| --- | --- |
| Some variations may be influenced by interactions with the environment. These variations are not inherited | Examples: * Change in pigmentation of skin colour throughout the seasons due to the sun (Tanning)
* Height and Weight can be influenced by diet.
 |