

# Teacher Instructions

## Rationale:

- The purpose of this game is to introduce and reinforce different biome aspects for students. The Big Idea, taken from the grade 4 curriculum is all living things sense and respond to their environment. This game shows how different environmental impacts can affect the health and functioning of different parts of a biome. The game also seeks to help students to understand biomes as large regions with similar environmental features, taken from the content portion of the science curriculum. The game has 3 different versions. Version A has the least amount of cards and an easier to obtain objective, version B incorporates more environmental impacts to biomes, and version C adds in more cards to create a more complex game and harder to achieve main objective.

## Logistics:

- 2-4 players
- ages 9+ (tailored to grade 4 BC Curriculum)
- included pieces - 116 of cards

## Objective:

- The goal of the game is to be the first player to lay down 5 matching biome cards to create a complete and healthy biome. A complete biome set includes the Biome Type, Vegetation, Temperature, Precipitation, and Wildlife. A biome cannot be considered complete if there are any damage cards in play on any category cards.

## How to play

- Refer to student instructions versions A-C

## Glossary:

- Biome Type Card - This card must be the first card layed down to start building a biome. Without this card a player cannot lay down any category cards.
- Category Cards - These cards are the 4 categories(Vegetation, Temperature, Precipitation, and Wildlife) that make up a player's biome. The category cards must match the biome type card that has been laid down.
- Damage Cards (Red) - These cards cause an impairment to be placed upon a category card in a player's biome. Place this card directly on top of the category card being damaged. The only way to remove a damage card from a biome is to play a Restore or Ultimate Defense card.
- Restore Cards (Purple) - These cards are used to remove a damage card from a player's biome. They can only be played during the card holder's turn. Once the card has been played, this card and the Damage card must go into the discard pile.

- *No Thanks* Cards (Pink) - These cards can immediately stop a damage or steal card. They may only be used once, then go into the discard pile.
- Bonus Cards (Orange) - These cards can be played on your turn to impair or defend your biome. They may only be played once then go into the discard pile. The *OOPS!* bonus card **must** be played immediately once it has been drawn; players cannot use a *No Thanks* card to veto the *OOPS!*.
- Played Cards - Cards that have been laid down on the table. They may include biome type cards, category cards, damage cards, restore cards, or bonus cards.
- Hand Cards - Cards that a player is holding in their hands. These cards are not visible to other players.
- Draw pile - Cards that are drawn at the beginning of a player's turn.
- Discard pile - Pile where cards are placed after being used, or if a player has too many cards in their hand.

## References:

There is an editable version of the card game for classes to personalize their biome card deck. The link below is for some inspiration/ ideas to prompt illustration ideas

<https://amslerartroom.wordpress.com/student-work/biome-illustrations/>

The following were used to create the information found on the biome games cards:

<https://www.arcgis.com/apps/Cascade/index.html?appid=6075024c90a34ce3ba300789b34a2925>

<https://ucmp.berkeley.edu/exhibits/biomes/freshwater.php>

<https://biomesmarine.weebly.com/climate.html>

<https://www.conserve-energy-future.com/freshwater-biome.php>

<https://www.earthecclipse.com/ecosystem/freshwater-biome.html>

<https://www.earthecclipse.com/ecosystem/marine-biome.html>

<https://education.seattlepi.com/environmental-dangers-tundra-6068.html>

<https://www.environment.gov.au/water/cewo/blue-green-algae-cew>

<http://www.hww.ca/en/wild-spaces/arctic-tundra.html>

<http://kids.nceas.ucsb.edu/biomes/grassland.html>

<https://quizlet.com/214454677/5-main-biomes-in-canada-flash-cards/>

[http://www.savitapall.com/Ecology/Notes/17\\_Biomes.pdf](http://www.savitapall.com/Ecology/Notes/17_Biomes.pdf)

<https://www.scienceworld.ca/resource/what-biome/>

<https://www.thecanadianencyclopedia.ca/en/article/tundra>