### Select a Biome from this list:

- Tropical Rainforest
- Temperate Deciduous Forest
- Taiga (Boreal Forest)
- Desert
- Tundra
- Grassland
- Savanna
- Freshwater Wetlands
- Marine (could designate tropical, polar, shallow, or deep seas)

Biome Research

#### **Biome Overview**

(Replace this text with your research)

(Name of your Biome)

(3 Pictures of your Biome)

(Describe what the climax community of your biome is) [Can find a picture, and use it as one of your 3, make sure it is labelled differently]

(General description of the climate of your biome)

(Annual average temperature and precipitation)

(Are there seasons)

#### **Biotic Factors**

(Replace this text)

(Identify at least 3 plants in the biome. What adaptations do plants require to survive)

(Identify 2 herbivores in the biome. What adaptations do they have to survive?)

(Identify 3 carnivores in this biome. What adaptations do they have to survive?)

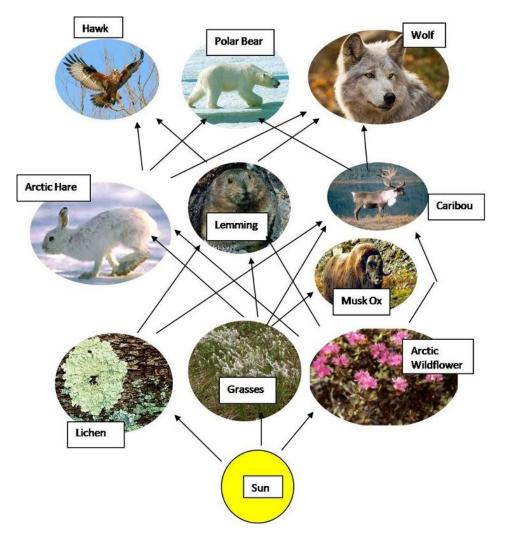
#### **Abiotic Factors**

(Replace this text)

(Identify at least 3 important abiotic factors in the biome that you picked and explain why they are important to the living organisms in the area)

(One abiotic factor needs to be at least one of the water cycle, carbon cycle or nitrogen cycle and how it is unique in this biome)

Food Web



An example of a food web. This food web is just to show you what one looks like, it would not get full points.

#### Food Web Instructions

On the next slide, using the information from Section 1 create a food web slide on the next slide. Make sure it follows the requirements below:

#### Requirements:

- At least 8 organisms
- A picture of each organism
- Scientific and common name of each organism
- Neat bolded arrows that show how energy flows between organisms
- Label each organism as a producer, primary consumer, secondary consumer, tertiary consumer, etc.

In a paragraph on the slide after your food web, summarize the movement of energy through your food web starting with the sun. Explain if/how the energy available changes as you move through the feeding relationships.

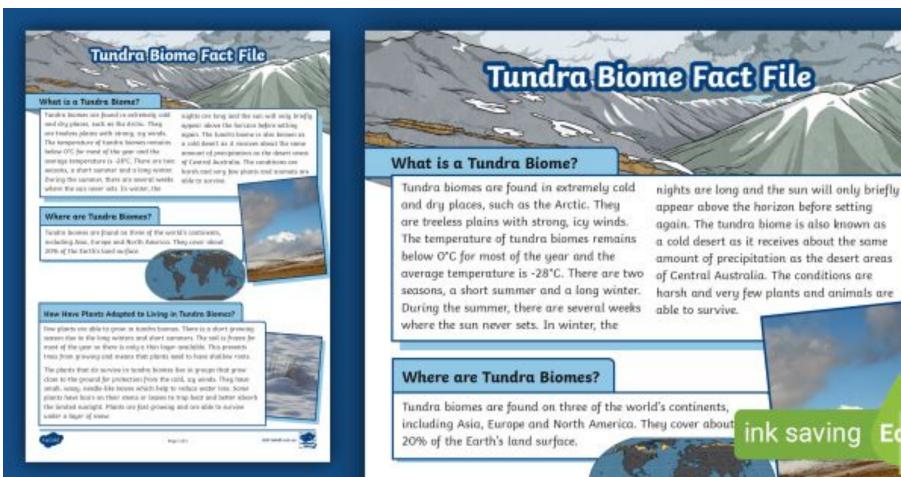
### Food Web Paragraph

(Replace this text)

(In a paragraph on the slide after your food web, summarize the movement of energy through your food web starting with the sun. Explain if/how the energy available changes as you move through the feeding relationships.)

Biodiversity and Human Impacts

Example of an Infographic. This infographic would not get full points, it is just for an example.



## Biodiversity/Human Impacts infographic

On the next slide, create an infographic of how biodiverse your biome is and how humans impact the biome. Use the requirements below:

#### Requirements:

- List and explain 2 limiting factors that affect your biome. Are they density-dependent or density-independent
- List 1 example of an invasive species in your biome describe how it affects the environment.
- Find and research 1 keystone species in your biome describe how it affects the environment. What happens if it goes extinct?
- Are there any man-made dangers that affect your biome? If so, what are they?
- How can humans protect your biome?

**Ecological Relationships** 

# Wanted Poster Example: (This would not get full points)

## WANTED! Predatory Polar Bears



Polar Bears predate on arctic hares. This is an example of predation in the Tundra Biome.

Predation is when a (definition of predation)

# Reward \$300

## Ecological Relationships Instructions

Pick 3 different Ecological Interactions to discuss. Create a wanted poster or a publicity poster for each interaction.

If it is negative, create a wanted poster with a focus on the organism that does harm.

If it is positive, create a publicity poster with a focus on the organism that does good.

Types of Relationships	Project Requirements
Competition Predation Mutualism Commensalism Parasitism Ammensalism	<ul> <li>Define the interaction</li> <li>Provide an example from your biome.</li> <li>Include a picture of the relationship</li> </ul>

## Poster 1

### Poster 2

### Poster 3

What's in the news?

### What's in the News instructions

Find a scientific article within the past 5 years that includes information about your choose biome. Write a short 2 - 3 paragraph review of the article, including the information below:

#### Requirements:

- Paragraph 1 is a 3 5 sentence summary of the article
- Describe the scientific significance of the article and possible future consequences (How might this be important for the future of your biome)
- Make sure your article is from a reliable source

#### What's in the News

(Replace this text)

(Find a scientific article within the past 5 years that includes information about your choose biome. Write a short 2 - 3 paragraph review of the article, including the information below:)

(Paragraph 1 is a 3 - 5 sentence summary of the article)

(Describe the scientific significance of the article and possible future consequences. How might this be important for the future of your biome)

(Make sure your article is from a reliable source)