

Life Story: IN THE BEGINNING...

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1. Roll the Dice **TWICE** to determine which trophic level your organism will occupy.

**Highlight your fate*

Sum of Dice	2	3	4	5	6	7	8	9	10	11	12
Trophic Level	Primary Consumer					Secondary Consumer				Tertiary Consumer	

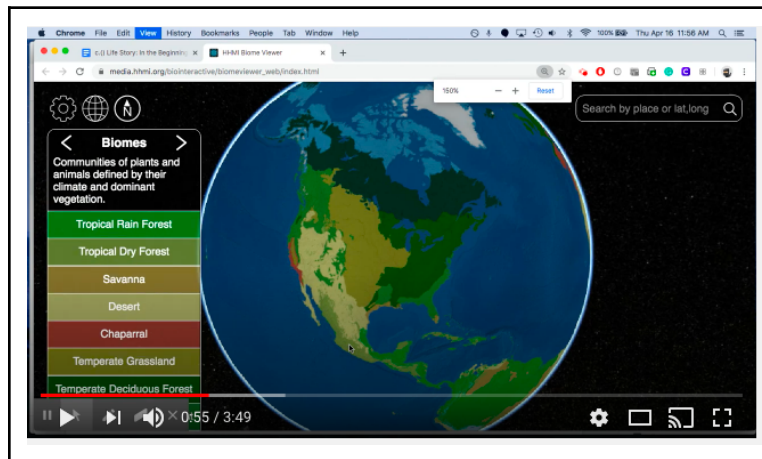
2. Define the function of organisms that occupy your **trophic level**:

Your Trophic Level:	
Research a definition of <i>your trophic level</i> :	

3. Now, you will begin to **Design Your Organism!**

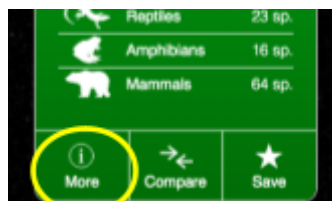
First, Choose your home biome.

Watch the video below, then follow the instructions that follow.



Instructions

1. Use the [BiomeViewer](#) to investigate different biomes.
2. Click on the 'More' button to learn more about the biome that is **most interesting** to you.



Choose a Biome for your Organism to live in and *Complete the table below:*

Name of Biome:	
Where It's Found?	
What it Looks Like and Feels Like?	
What Grows?	
Number of MAMMAL species	
Number of AMPHIBIAN species	
Number of REPTILE species	

4. *Follow your heart...* Choose which life plan you will follow:

**Highlight your selection*

Mammal	<i>Amphibian</i>	REPTILE	Bird
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5. Using your results from the beginning of the assignment: Click the link that corresponds to **your Trophic Level** and *answer the list of questions to design your organism's traits.*

<u>Primary Consumer</u>	<u>Secondary Consumer</u>	<u>Tertiary Consumer</u>
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You only need to complete the section that corresponds to your trophic level.

Primary Consumer

1. **Food:** Since your organism is an herbivore, you need to **consume a LOT of food!**

Explain **what type of food** your organism will consume so they can *grow, survive, and reproduce*.
Also, explain a trait your organism will need to be able to eat a **TON** of your food type.

2. **Defense:** Remember that you are the **PREY of a predator** in your biome.

Explain **how your species will defend itself** so it can eat in safety.

3. **Environment:** Explain **how your organism will survive the extreme environmental conditions** that arise in your biome.

4. **Reproduction:** As a Primary Consumer, you have to constantly avoid predators. Unfortunately, your species gets attacked often so your species must:

take extreme care of your babies **-or-** have a LOT of babies at once **-or-** have babies often

... in order to keep your population alive.

Describe **how your organism will reproduce** and **parent the offspring** to keep the population stable.

5. Create **5** traits and assign alleles that follow the pattern of **Complete Dominance**, that will help your species *survive and reproduce* in your biome.

Name of Trait	Allele Letters	Dominant Phenotype	Recessive Phenotype

6. Create **2** traits and assign alleles that follow **Incomplete Dominance** Inheritance, that will help your species *survive and reproduce* in your biome.

Name of Trait	Allele Letters	Homozygous Dominant Phenotype	Homozygous Recessive Phenotype	Heterozygous Phenotype

7. Create **2** traits and assign alleles that follow **Co-dominance** Inheritance, that will help your species *survive* and *reproduce* in your biome.

Name of Trait	Allele Letters	Homozygous Dominant Phenotype	Homozygous Recessive Phenotype	Heterozygous Phenotype

8. Transfer the information from this assignment into the [Life Story gSlide SciNB](#) (slides 5-10):

Make a copy of the *gSlides* to start your own **Field Notes** for your organism

[Life Story gSlide SciNB](#)

Secondary Consumer

1. **Food:** As a secondary consumer your organism is a ***carnivore***, ***omnivore***, or ***scavenger***.

Explain **what type of food** your organism will consume so they can *grow, survive, and reproduce*.

2. **Hunting:** Explain **how your species will get their food** from hunting or scavenging.

3. **Defense:** Remember that you are the **PREY of a predator** in your biome.

Explain **how your species will defend itself** so it can eat in safety.

4. **Environment:** Explain **how your organism will survive the extreme environmental conditions** that arise in your biome.

5. **Reproduction:** As a Secondary Consumer, you have to avoid predators **and** hunt for food. Your species is always on alert to avoid being attacked by predators. Your species must:

take extreme care of your babies -**or**- have a LOT of babies at once -**or**- have babies often

... in order to keep your population alive.

Describe **how your organism will reproduce** and **parent their offspring** to keep the population stable.

6. Create **5** traits and assign alleles that follow the pattern of **Complete Dominance**, that will help your species *survive and reproduce* in your biome.

Name of Trait	Allele Letters	Dominant Phenotype	Recessive Phenotype

7. Create **2** more traits and assign alleles that follow **Incomplete Dominance** Inheritance, that will help your species *survive* and *reproduce* in your biome.

Name of Trait	Allele Letters	Homozygous Dominant Phenotype	Homozygous Recessive Phenotype	Heterozygous Phenotype

8. Create **2** more traits and assign alleles that follow **Co-dominance** Inheritance, that will help your species *survive* and *reproduce* in your biome.

Name of Trait	Allele Letters	Homozygous Dominant Phenotype	Homozygous Recessive Phenotype	Heterozygous Phenotype

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Tertiary Consumer

1. **Food:** As a tertiary consumer your organism is a top predator.

As a Top Predator, you must be:

a master at hunting *larger animals* **OR** *genius at capturing LOTS of really small animals*.

Explain **what type of food** your organism will consume so they can *grow, survive, and reproduce*.

2. **Hunting:** As a Top Predator, you must be a master at hunting larger animals or genius at capturing LOTS of really small animals.

Describe **how your species will get their food** from hunting.

3. **Environment:** Explain **how your organism will survive the extreme environmental conditions** that arise in your biome.

4. **Reproduction:** As a Tertiary Consumer and Top Predator, you do not have enough energy to have a lot of babies. If you have too many babies, they will compete for your food and space resources.

Describe **how your organism will reproduce** and **parent the offspring** to keep the population stable.

5. Create **5** traits and assign alleles that follow the pattern of **Complete Dominance**, that will help your species *survive* and *reproduce* in your biome.

Name of Trait	Allele Letters	Dominant Phenotype	Recessive Phenotype

6. Create **2** more traits and assign alleles that follow **Incomplete Dominance** Inheritance, that will help your species *survive* and *reproduce* in your biome.

Name of Trait	Allele Letters	Homozygous Dominant Phenotype	Homozygous Recessive Phenotype	Heterozygous Phenotype

7. Create 2 more traits and assign alleles that follow **Co-dominance** Inheritance, that will help your species *survive* and *reproduce* in your biome.

Name of Trait	Allele Letters	Homozygous Dominant Phenotype	Homozygous Recessive Phenotype	Heterozygous Phenotype

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