## **Objective**:

For individual students to show the progression of energy and nutrients through your ecosystem and back to the primary producer in a stop motion animation video.

## Procedure:

- 1. Begin with the food web for the Ecosystem you group modeled.
- 2. Identify the primary producer and apex predator you would like to link in your video.
- 3. Choose a unique path from your primary producer to your apex predator, and a detritus pathway from apex predator back to your primary producer. This is an individual video and your chain should be different from that of your peers.
- 4. Create a unique animation that progresses nutrients and energy from the sun (or volcano) through your producer, three tiers of consumer (including an apex predator), and back through a detritus pathway back to the primary producer.
- 5. Video should include: original images and names of all species, clear indications of the habits and niches of species, predator-prey relationships, and clear tracking of nutrients and energy throughout the video

Food Chain		Stellar	Good	Good Enough	Not Good	You made
Stop-Motion					Enough	Mickey
				_	-	Mouse cry.
Rubric (30pts)		5	4	3	2	1
U s i g	Primary Producer Consumers	A clear and accurate primary produce is included with-in its ecological niche. The sources of energy for the producer is clear and accurate Clearly and accurately shows the progression of energy through three tiers of unique consumers, including a clear Apex predator. All consumers are shown within their	An accurate primary producer is included with-in the ecosystem. The sources of energy for the producer is accurate Accurately shows the progression of energy through three tiers of consumers, including a clear Apex predator.	An accurate primary producer is included with-in the ecosystem. shows three tiers of consumers, including a clear Apex predator.	A primary producer is included with-in the ecosystem. Shows less than three tiers of consumers	Primary producer in present Consumers are present
K n o W I e d g e	Decomposers and Detritivovers	ecological niches Video shows a clear and accurate Dritius pathway showing how nutrients cycle back to the primary producer, including at least one each: scavenger, detritivores, and decomposer with-in their ecological niches.	Video shows an accurate Dritius pathway showing how nutrients cycle back to the primary producer, including at least 2 of 3: scavenger, detritivores, and decomposer with-in their ecological niches.	Video shows an accurate Dritius pathway showing how nutrients cycle back to the primary producer	Video shows a pathway showing how nutrients cycle back to the primary producer	Scavenger or Decomposer or Detritivore is present

Ρ	Food Chain	Energy and nutrients clearly,	Energy and nutrients	Energy and	Energy and	There is a
r		and accurately progress throughout the chain from	accurately progress throughout the chain	nutrients progress	nutrients progress	flow of energy
0		the primary producer to the	from the primary	throughout	throughout the	shown
С		apex predator and back	producer to the apex	the chain from	chain from the	
е			predator and back	the primary	primary	
S				producer to	producer to	
S				the apex	the apex	
i				predator and	predator	
n	<b>_</b>			back		
g and Ev alu	Ecosystem	The Ecosystem is clearly, consistently, and accurately included within the entire progression of the video. Ecosystem clearly includes: 1) The name and location of the ecosystem, 2) Habit or niche of every species, 3) role the environment plays in the Herbivory or predatory relationships, and 4)where detritus exists in the	The Ecosystem is clearly and accurately included within the video. All four elements of the ecosystem are present	The environment is accurately included within the video. 2/4 elements are included	Environment is included in within the video	Species exist outside of a environment with-in the video
a t i g	Creativity	ecosystem Animation is creative, clean, and unique. The transition between tiers is very smooth	Animation is creative and clean. The transition between tiers is smooth	Animation is clean. There is a clear effort to make the transition between tiers smooth	Animation is choppy or transitions are not smooth	The process is animated
	Processing and Evaluating					

\*Up to Five points extra credit sound/music of voice over based on creativity and enhancement of the video\*