

Welcome!





Who Are We?

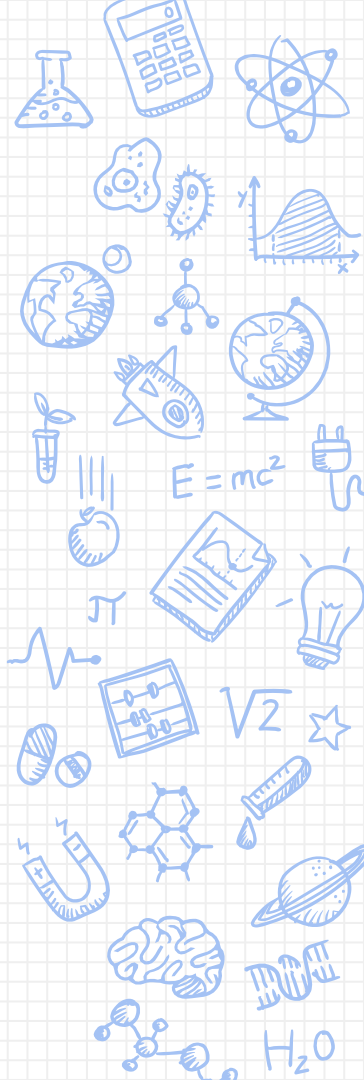
What is NAMEPA's Mission?

NAMEPA's mission is to educate seafarers, students, & the public on marine environments, marine pollution, and the maritime industry.



How do we accomplish this?

We work to educate students of all ages on the balance between commerce & conservation, & to inspire students to use this knowledge to become better ocean stewards!





What Do We Do?



Who Are You!

- X How have you interacted with the marine environment?
- X What is your favorite marine species?





Do You Know....

Questions:

- 1) I know how energy flows through an ecosystem.
(Yes or No)
- 2) I can list 5 species that live in either a wetland, coral reef or mangrove habitat.
(Yes or No)
- 3) I can identify 3 environmental important functions of coastal habitats.
(Yes or No)
- 4) I know one positive change I can make to protect coastal habitats.
(Yes or No)







Activity: ABC Brainstorm

Let's brainstorm words or phrases that relate to the topic of **Marine Ecosystems**

For example:

A: aquatic, alive, algae

B: biodiversity, barrier reef, beach

C: coral, coastal, crabs



A: algae, aquatic, angel fish	N: narwhale, nemo
B: blue whales, boats, beach	O: ocean, octopus, orca whales
C: catfish, coral, clownfish, camo, crab	P: parrot fish, puffer fish, python, ponds
D: deep, dolphins, diversity	Q: quiet, quail
E: eels, electric eel, eating, ecosystem	R: rough, running, rocks, reef
F: fish, food, fin	S: starfish, sea, shark, squid, swimming, sand
G: grass, gut, gills, great white shark, goldfish	T: tiger shark, tide
H: home, hat, habitat, heart, harp seal	U: under water, under the sea, u, ursula
I: igloo, ice, iceberg, I, imitate	V: violent, viking,
J: jellyfish, jaw	W: whales, waves, whale shark, walrus
K: kelp, killer whale, killing, kraken	X: x-ray fish

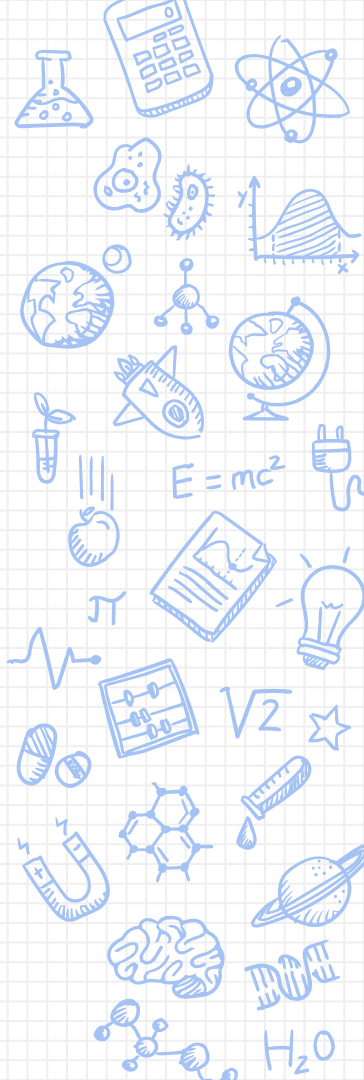


What Does This Turtle Need to Survive?





What Does This Kelp Need to Survive?





- Community of interacting organisms and their environment
- Contains **animals, plants**, and **non-living things**
- *Can you give an example of how the parts of an ecosystem interact?*



Ecosystems in Action!



Coral Reefs provides a suitable environment for fish, sharks, algae, sponges, and other species.



A subropical forest provides a suitable environment for various fauna and flora.



A stream can provide the services required for species to thrive.



The soil provides the necessary nutrients for the different plants to grow.





A still from Disney's 'The Lion King' showing Simba and Nala. Simba, a large adult male lion with a thick red mane, stands on the left, looking towards the right. Nala, a smaller adult female lioness, stands in front of him, looking down. They are on a grassy hill. The background features a vast savanna landscape with rolling green hills, a winding river, and a clear blue sky with light clouds.

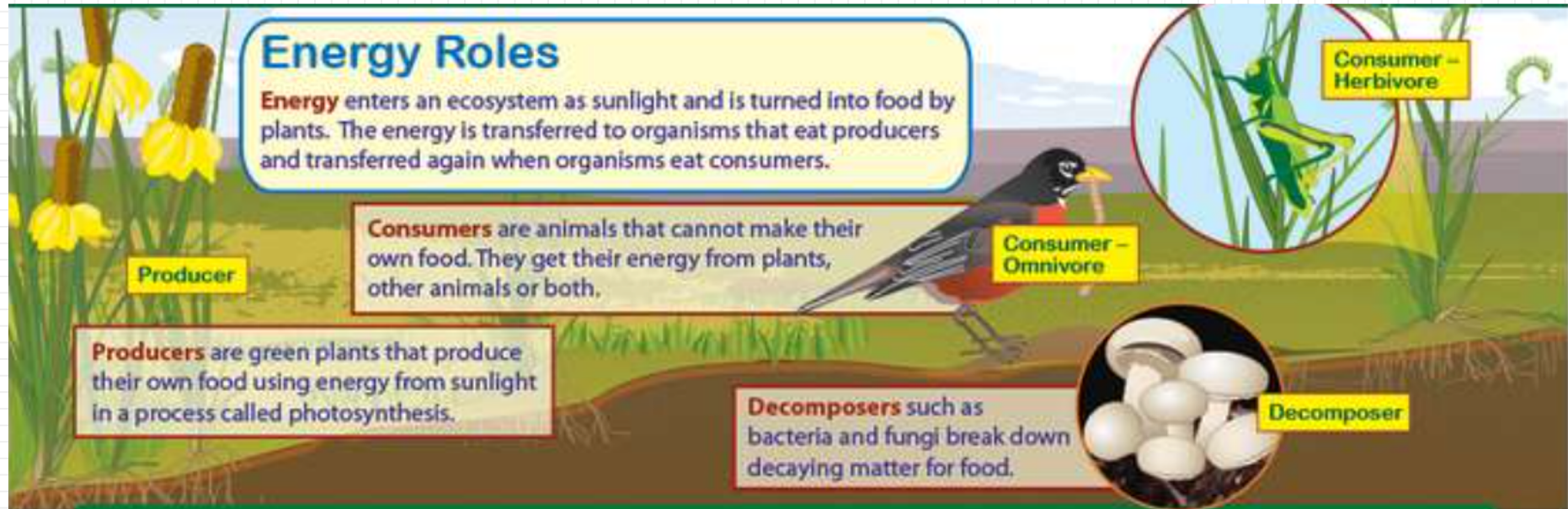
N Ecosystems: Food Chains & Food Webs

- ***What kind of information do we get from food chains & food webs?***
 - How energy is transferred in an ecosystem!
 - Energy Flow
- ***Where does the energy you need to move around with come from?***
 - The food you eat!





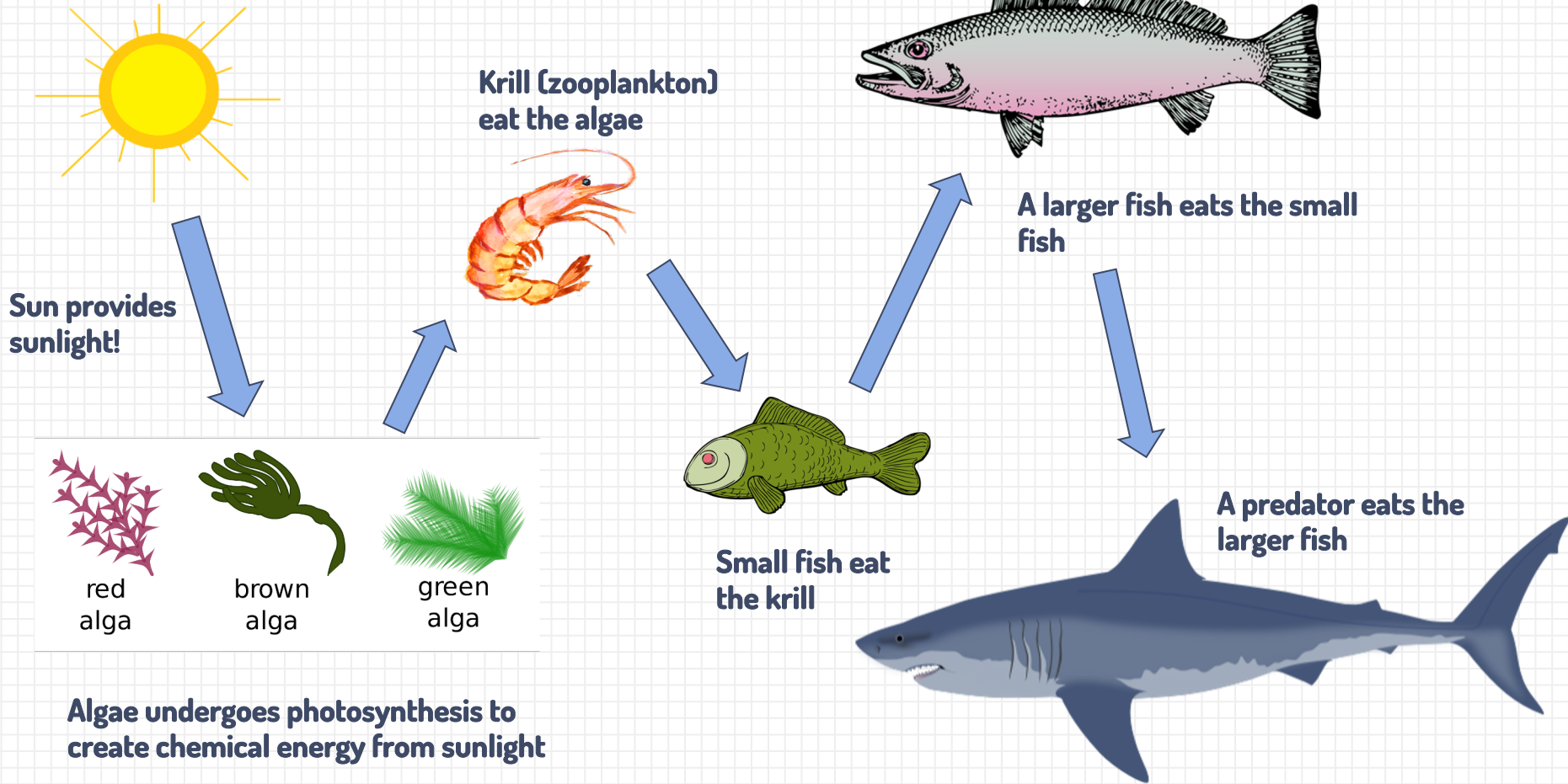
How Does Energy Flow Through an Ecosystem?



- Energy in food can be traced back to the sun
- Animals eat to get energy



Aquatic Food Chain





Aquatic Food Web

