



OVERVIEW

Description

Using yarn, see the connections between ocean items (animals, plants, habitat items)

Learning Outcomes

- See how interconnected organisms in the ocean are
- What happens if one (or more) link in the chain is taken out

Outline

1. Introduce food webs and how things in nature depend on each other to survive (5 mins)
 - a. Example marine food chain
2. Activity (20 mins)
3. Wrap up (5 mins)

Materials

Item	Quantity Per Child	Quantity Per Class
<ul style="list-style-type: none">• Name tags (or small piece of paper)	<ul style="list-style-type: none">• 1	<ul style="list-style-type: none">• NA
<ul style="list-style-type: none">• Yarn	<ul style="list-style-type: none">• N/A	<ul style="list-style-type: none">• 1 ball/skein
<ul style="list-style-type: none">• Markers	<ul style="list-style-type: none">• 1	<ul style="list-style-type: none">• NA
<ul style="list-style-type: none">• Optional: tape	<ul style="list-style-type: none">• NA	<ul style="list-style-type: none">• 1 roll

KEY INFORMATION

Topic 1: The ocean is a very interconnected place. Since it does not have many physical boundaries, organisms are free to interact with one another. A food web shows how energy is passed from one organism to another and can get very complicated in the ocean.

Topic 2: Producers gain energy from the sun which is moved up the food web by consumer who eat the producers. Example food web: » Orcas eat seals » Seals eat salmon » Salmon eat herring » Salmon live in the open ocean » Herring lay eggs on kelp » Urchins eat kelp » Sea otters eat urchins » Herring eat zooplankton » Humpback whales also eat zooplankton etc.

LESSON PLAN & PROCEDURE

Marine Food Web

1. Introduce food webs and how things in nature depend on each other to survive (5 mins)
 - a. Example marine food chain
 - i. » Orcas eat seals » Seals eat salmon » Salmon eat herring » Salmon live in the open ocean » Herring lay eggs on kelp » Urchins eat kelp » Sea otters eat urchins » Herring eat zooplankton » Humpback whales also eat zooplankton etc.
 - ii. Come up with others using different organisms
2. Activity (20 mins)
 - a. Give each participant a nametag/small sheet of paper
 - b. Have them write their name on it and assign each a plant, animal, habitat or other related item that was discussed in the food web
 - c. Ask participants to stand in a circle and place their cards in front of them. It may be helpful to go around the circle and have each participant say their name and what aspect of the food web they are.
 - d. Choose a participant to start at. Give them the ball of yarn and ask them how they are connected to ONE of the other participants. For example, if the child has a salmon on their card they may choose to throw to a child with eagle on his card. Eagles eat salmon (i.e., an eagle is a predator to salmon). Use vocabulary you are comfortable with and that suits the age level of your group
 - e. Participant starts the web by throwing the ball of yarn to the one chosen connection while also holding the end of the string (important no one lets go)
 - f. Repeat until the ball of yarn is finished and a web is formed
 - g. Part two: Once web is finished, have one participant drop their piece of yarn. Every other who is connected to that one piece must also drop their yarn. This continues until the web is no longer there or the chain is broken.
3. Wrap up (5 mins)
 - a. Discuss the shape of the web and how complicated it could get
 - b. Discuss how easily the chain was disrupted once one aspect was taken out

Debrief

- Bring up current ocean issues such as shark finning and discuss how that would affect the rest of the ocean

REFERENCES & RESOURCES

