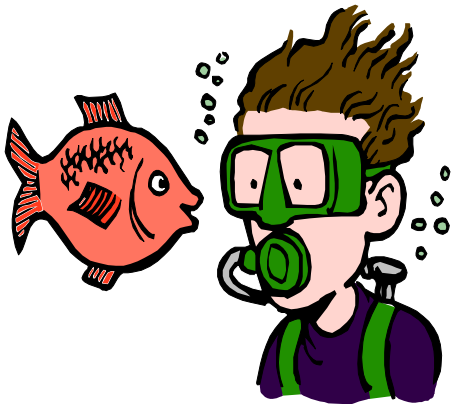
How Deep Is the Ocean?



Objectives:

Students will sample the organisms at different depths of the oceans.

Students will draw conclusions from the data.

Materials:

Lunch sacks, different organisms from different depths, graph paper.

Procedure:

1. Reach into each sack and withdraw 1 sample. Record your data.
2. Compare your results with the rest of the class.

Results:

My data:

Depth	Organisms	Numbers
20 feet		
40 feet		
60 feet		
80 feet		

1. Make a bar graph of the ten most common species from the class's data.

Class data:

Organisms	

20 feet 40 feet 60 feet 80 feet

2. Make 3 inferences based on the data on the graph.

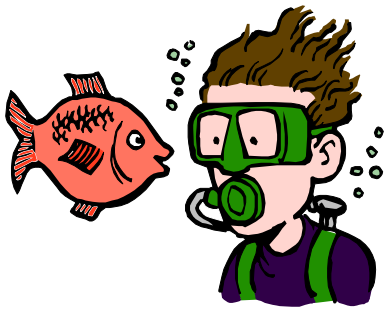
3. At what depth would you expect to find large fish?

4. At what depth would you expect to find conehead crab?

5. Which fish seem to be most common? How do you know?

6. Why don't all animals live at the same depth?

How Deep Is the Ocean?
Teacher's Instructions



Objectives:

Students will sample the organisms at different depths of the oceans.

Students will draw conclusions from the data.

Materials:

Lunch sacks labeled 20', 40', 60', 80'; different organisms from different depths; markers

Procedure:

1. Use pictures of the following with numbers on their backs, or make name tags with numbers:
   20': arrow crab (10), blue chromis (20), fairy basslet (5), stoplight parrotfish (2), bluehead wrasse (5), brain coral (3), sea fan (4), sergeant major (15), star coral (7), squirrelfish (4), black sea urchin (30), Christmas tree worm (9), goatfish (16), barracuda (5), spotted drum (1), chub (10), flounder (2)
   40': red hind (6), arrow crab (10), blue chromis (6), yellowtail snapper (20), French grunt (20), porkfish (10), trunkfish (4), sergeant major (15), rock hind (6), rock beauty (6), queen triggerfish (2), scrawled filefish (2), foureye butterflyfish (6), banded butterflyfish (4), sea fan (6), brain coral (5), yellow stingray (2), tarpon (6), spotted moray (12), barracuda (10), splendid toadfish (1), vase sponge (2), spotted drum (2), chub (6), soft coral (10), anemone (10)
   60': conehead crab (10), green moray (4), barracuda (12) trumpetfish (5), lizardfish (5), squirrelfish (8), bigeye (3), grouper (4), rock hind (4), bar jack (6), pompano (3), yellowtail snapper (12), star coral (13), vase sponge (10), tube sponge (8), mahogany snapper (4), lobster (10), white grunt (15), Spanish grunt (6), spotted drum (2), chub (2), spadefish (2), nurse shark (1), grey angelfish (4), queen angelfish (4), French angelfish (4), vase sponge (6), tube sponge (20), soft coral (10), anemone (5), spotted moray (5), arrow crab (6), lobster (6), hogfish (2), Spanish hogfish (2), blue tang (6), black durgon (6), parrotfish (4), orange filefish (4), scrawled cowfish (2), turtle (1), plate coral (20), spider crab (4)
   80': conehead crab (10), barracuda (12), lizardfish (5), squirrelfish (8), bigeye (3), grouper (4), rock hind (4), bar jack (6), pompano (3), star coral (13), vase sponge (10), tube sponge (8), mahogany snapper (4), lobster (10), spadefish (2), nurse shark (1), grey angelfish (4), queen angelfish (4), French angelfish (4), vase sponge (6), tube sponge (20), soft coral (10), anemone (5), arrow crab (6), turtle (1), plate coral (20), spider crab (4)
2. Allow students to sample from each sack. This can be a small group or whole class activity.
3. Not all animals may be sampled at any of the different depths. The numbers represent the frequency of animals sighted at a given depth.