



SCIENCE EXPERIMENT FORM



Name: _____

Experiment Title: _____

- QUESTION** - What do I want to find out?

- HYPOTHESIS** - What do I think I will find out?

- PROCEDURE** - How will I find out?
a) _____
b) _____
c) _____
d) _____
- RESULTS** - What actually happened?

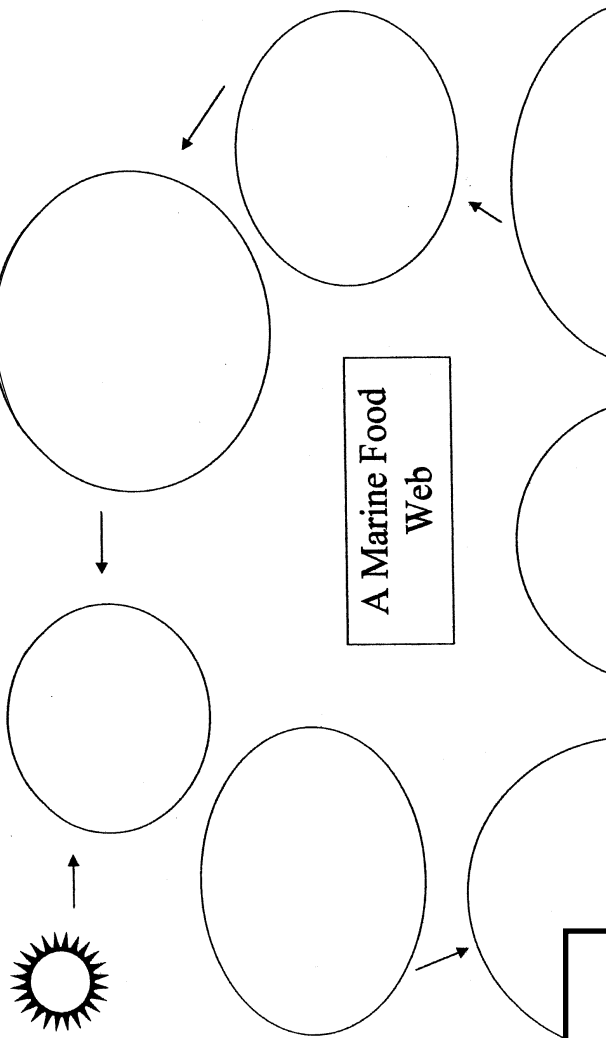
- CONCLUSION** - What did I learn?

Optional Lesson

There are many a

- Make p

- Make o



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16



- Using a white paper plate, create an ocean scene. Have students paint the background blue, then glue sand on the bottom half of the plate. Use construction paper to make fish, shells, plants, rocks, waves, etc. and glue these to the plate. Give each student another paper plate which they cut the bottom out of and then glue on top of the ocean scene. Cover the hole with plastic wrap.

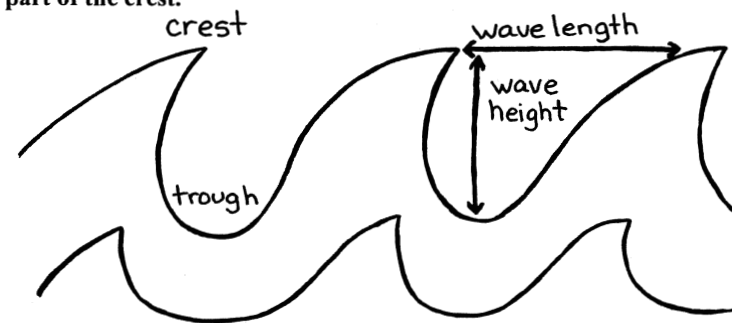


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FORMATION OF WAVES

Waves are created by wind moving over the water. Friction between the surface of the water and the moving air piles the water up into ridges that become waves. When a light breeze blows, small waves called ripples, are formed. When a strong wind blows, whitecaps will form on an ocean.

The crest and the trough are the top and bottom points of a wave. Wave length is the distance between two crests. Wave height is the distance between the most bottom part of the trough and the highest part of the crest.



Tsunami waves are waves that are created by disturbances such as earthquakes, landslides, or underwater volcanoes. The word "tsunami" is a Japanese word meaning "storm-wave". These waves are similar to wind waves because they also have crests and troughs, but they are much greater in size than wind waves and they are much more destructive.

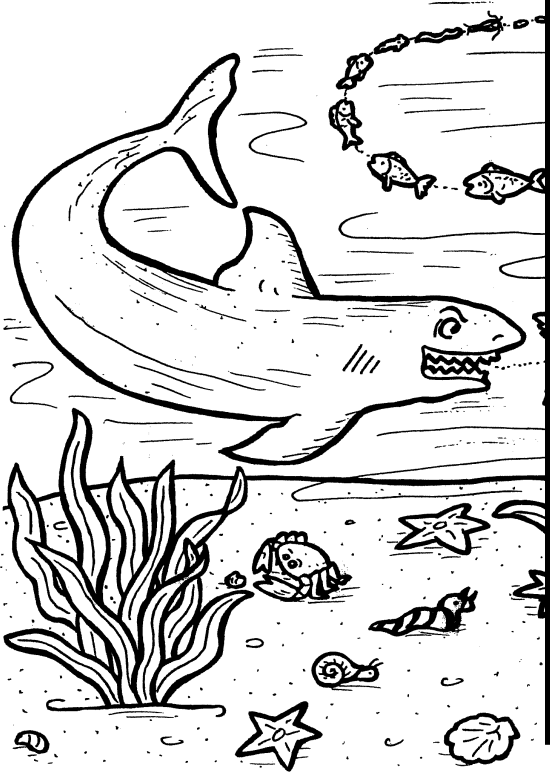
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21

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Optional Lesson #7 - Research Project

Have students research an ocean creature and write a report on it and/or difficult to get students motivated about sharks, whales, dolphins, octopus, treasure, killer whales, manta rays, icebergs and all kinds of ocean-related topics.

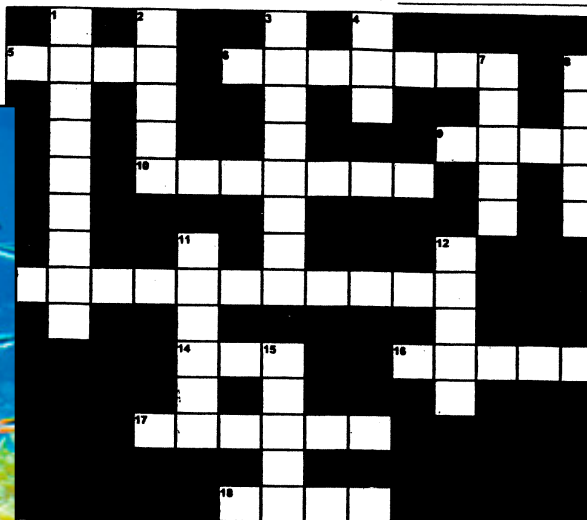


Optional Lesson #8 - Bulletin Boards

Create a bulletin board using a fishing net, seashells, sand, or any other ocean paraphernalia. Pictures of books about oceans could be incorporated with the bulletin board.

OCEANS ALIVE CROSSWORD

Name: _____



1. The _____ major oceans covering 71% of our planet.
2. The _____ of Hawaii is located in the _____ Ocean.
3. _____ moving over water forms _____.
4. _____ of wave can be created by earthquakes and underwater volcanoes.
5. _____ Slope, you can find deep canyons.
6. _____ pour is a _____ that is produced when water evaporates.
7. _____ are created by the gravitational pull between the earth and the moon.
8. _____ is the bottom point of a wave.
9. _____ er to stay afloat in _____ water.
10. _____ in the ocean is caused by oil spills and toxic wastes.
11. _____ is the top point of a wave.
12. _____ is a _____ word meaning "storm-wave".
13. _____ on Valdez spilled millions of gallons of _____ into the ocean.
14. _____ plankton is the most important item of the marine food _____.
15. _____ plants are abundant along the continental _____.
16. _____ h are eaten by _____ fish.
17. _____ in floor is called the _____.
18. _____ obtained underwater breathing apparatus" is used by _____ divers.

35

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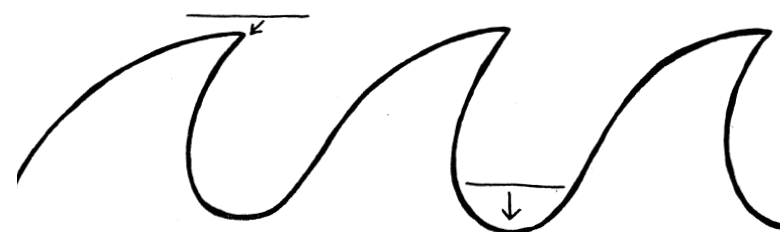
TEST - OCEANS

Name: _____

A. Fill in the blanks:

- The four major oceans are the _____, _____, _____, and _____.
- Together, these oceans cover about _____ % of the earth's surface.
- Tides occur _____ every twenty-four hours.
- _____ is the force that pulls the earth towards the moon.
- _____ are the most important living things in the ocean.

B. Label the following diagram of a wave with its two parts:



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44

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Oceans Alive



AIR FACT CARD

- 1. Can we see air?

- 2. Can we taste air?

- 3. Can we smell air?

- 4. Can we feel air?

- 5. How do we know there is air all around us?

- 6. Name three gases found in the air.

- 7. Why do people, animals, and plants need

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6. Compare different aspects of your life in different weather by filling out the following chart:

Date	Direction of Wind	Force of Wind (none, breeze, strong wind, etc.)	T

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VOCABULARY MATCH

Air	found all around us
Wind	moving air
Oxygen	we breathe it in
carbon dioxide	we breathe it out
Water	a liquid

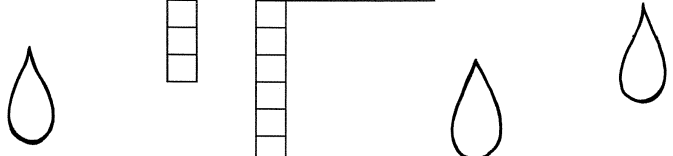
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SCIENCE FAIR PROJECT PLANNING

Discovery Question:

Materials:

Steps:



- ACROSS**
2 Water vapour is a _____.
4 _____ is found all around us.
5 Water is a _____.
7 _____ occurs when water vapour turns to water.
9 We breathe out _____ dioxide.
10 We breathe in _____.
- DOWN**
1 _____ is moving air.
3 Ice is a _____.
6 _____ makes our air and water unclean.
8 _____ occurs when water turns to water vapour.

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Word search grid:

```
  I E I Y
  N D         H B F E C Y
  C A R B O N D I O X I D E B
  R P O L L U T I O N C J P O V
  M O W I N D T Y S O R O Y A T I
  X W X J C D P E Q T F F W R I C
  J Y O X Y G E N D V G T K P B
  E S U Q Q D R N T W A T E R T
  B A S N P T S W D P Q K
  V E V A P O R A T I O N U
  V F I D L S T T L T N Y U N F
  P N D G O R R V D A I R Z R G
  T K N U J U M K R Q O L W H
  D S R R P L K U N R
  Z O O V F X
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- condensation
- evaporation
- carbon dioxide
- pollution
- air
- wind
- ice
- vapour
- oxygen
- water

UNIT TEST

A. Write the meaning of the following words:

n _____

sation _____

ation _____

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UNIT EVALUATION

Three things that I have learned about air and water are:

- 1. _____

- 2. _____

- 3. _____

One thing I liked about this unit was:

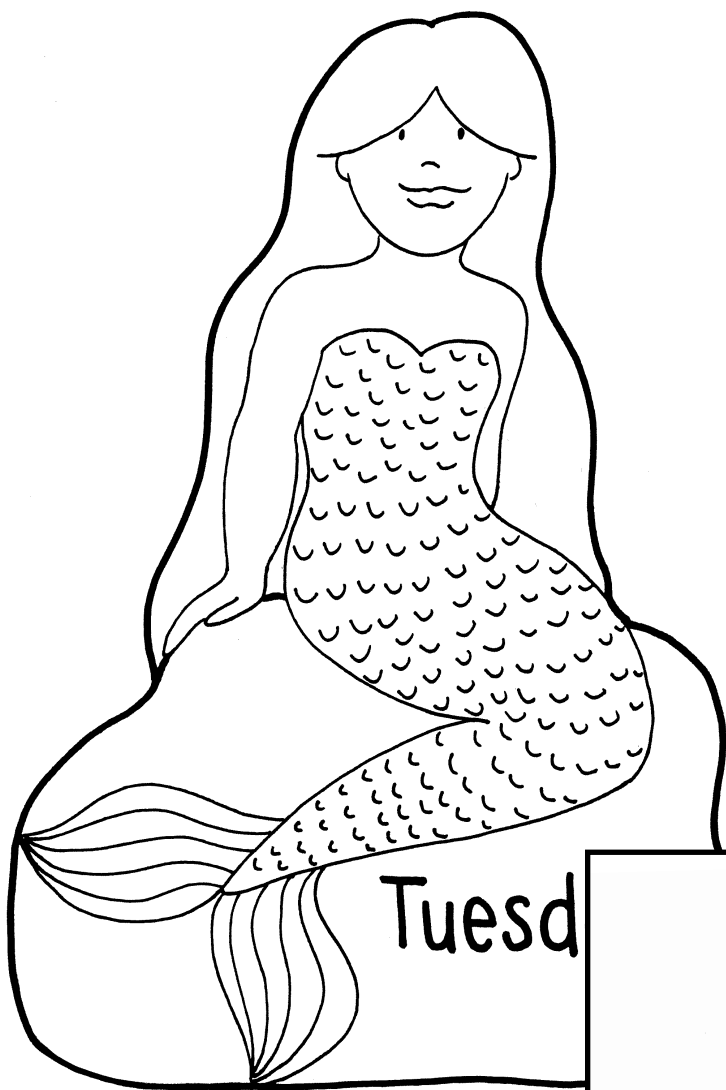
- 1. _____

One thing I disliked about this unit was:

- 1. _____

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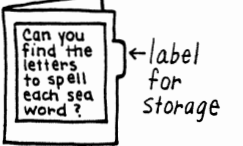
Monday is a mermaid
 She lives in the sea
 Her friend is an octopus
 Each day the two

Hands On

For each activity, you'll need a file folder and a zipclose bag or envelope (to store loose pieces)

Glue the instruction card for each activity on the outside of the file folder.

Laminate all your game pieces.



1. Whales and Water Sprays for Uppercase and Lowercase matching.

- photocopy as many whales and watersprays as desired.
- either photocopy onto coloured bond paper and mount on a bristol backing, or photocopy directly onto a tag or construction paper.



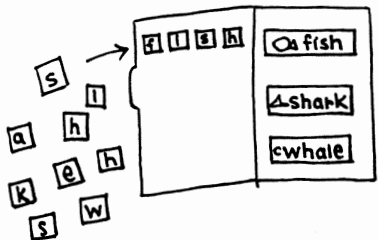
2. Big Fish, Little Fish for Colours

- leave the big fish white and print the colour word.
- colour in the little fish.



12. Word Cards - Letter Recognition

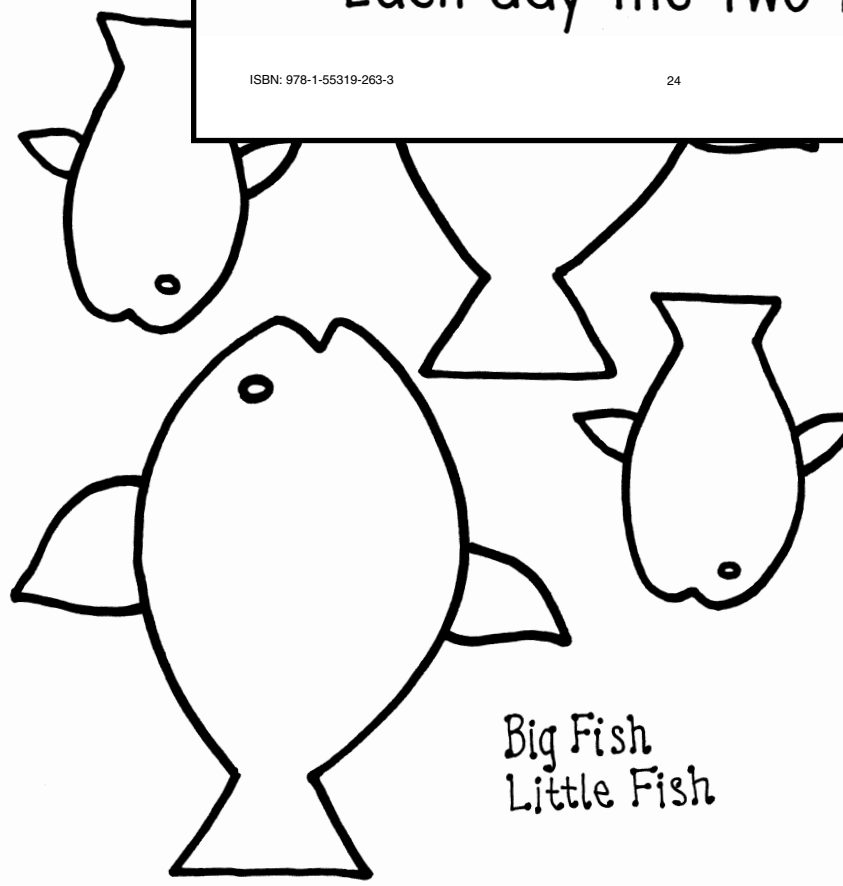
- Glue 2 or 3 selected journals inside a file folder.
- Glue an envelope on the outside.
- Cut out cardboard squares with letters from the words printed on the cards.



Students and order the letters

Patterns Begin Here!

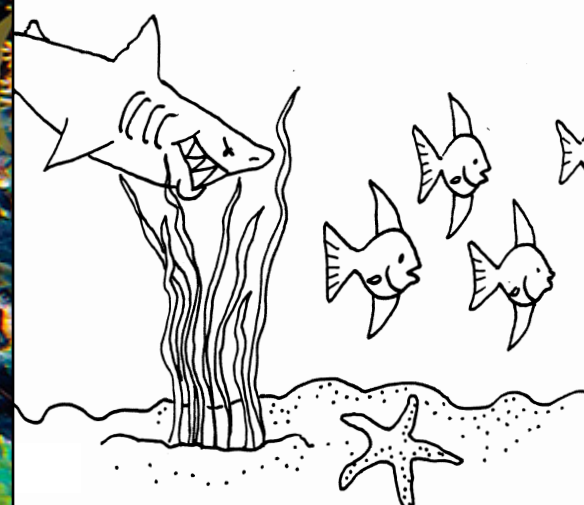
Can you find the letters to spell each sea word?



Song: to the tune of "Row, Row, Row Your Boat"

Four Little Fish

Swim, swim four little fish,
 around the sea.
 Just watch out for Mr. Shark,
 soon you will be three.



Photocopy game board on 2 pages. Highlight with colour.

Glue inside file folder or on bristol board.

Photocopy game cards onto coloured paper. Cut out. Mount on bristol board.

Include cards, a die and shells for markers with the game.

Glue directions out the outside of the folder.

Shell Game - How to Play!

You'll need 2-3 players, 1 die, a shell marker for each player, the Shell Question cards. Each player takes turns.

Place the cards face down. Roll the die. If you land on a shell, pick up a card. Count "how many." Ask the other players to check your answer. Put the card back at the bottom of the pile. It is the next player's turn.

My name is _____

If I were an _____,

I could eat 8 _____

at one time!

Can you draw a picture to go with your answer?



The Sea

