CGA-San Joaquin Valley
Teacher Geographic Units
K-6

LESSON #       O - 4

UNIT TITLE:    Oceans

Created By:    Karen Kubota - Summer 2001

GRADE:         1st
Oceans

Karen Kubota

1st Grade

Linda Bogardus
Master Teacher

Summer 2001
BINKO /Study Guide for Geographic Alliance
(Always make sure your type on the transparency is big enough to show up clearly on the overhead - to back row of classroom)

Name of Lesson
by (name of presenter)
For Grades
School Name

Introduction/Set
Introduce the concept objective and draw on students background knowledge

Purpose/Set
Reinforce the “Five Themes”

Objective: (only one)
The students will __________________________ by __________________________ (Bloom’s Taxonomy) (Tell the learners what they are going to learn - make it relative to their everyday life and why - and tell them how they are going to learn the objective)

Vocabulary
(Introduced in lesson)

Standards
(Grade Level - Kemper’s Standards Book)

Materials:
(Used in lesson preparation/activity)

Procedures:
(step by step instruction and/or activity procedure - assume nothing)
The teacher will....
The students will....

Lesson Extension: (What other activities/lessons could be taught to support this, your main objective)

Attachment/Support Data
(Bibliography - source of resource gathering)
Identifiable Standards

Math Standards

Standard #1: Number and Operation
   Students demonstrate knowledge of basic skill, conceptual understanding, and problem solving in number and operations.

Language Arts Standards

Standard #4: Writing
   The student organizes thoughts and information for writing, with assistance as appropriate, for audience and purpose.

Standard #5: Writing
   The student writes to communicate for a variety of purposes.

Standard #6: Writing
   The student is beginning to use, with some assistance, appropriate conventions of written language.

Standard #7: Listening and Speaking
   The student uses speaking and listening skills to communicate effectively.

Science Standards

Standard #1: Scientific Thinking
   The student demonstrates an understanding of scientific thinking by using the reasoning strategies of the scientific method, scientific knowledge and common sense to formulate questions about, understand, and explain patterns, processes, and problems of the world.

Standard #3: Earth Science
   The student demonstrates an understanding that the Earth and the sky undergo patterns of change over time.
Rationale

This ocean unit was suggested by my master teacher as the next unit she would like to have taught in the classroom. The students had already completed the basis of a classroom bulletin board by finger painting an underwater background to which large paper kelp were attached. This bulletin board will be completed as part of the unit as a way of displaying student work for open house later this month.

Students of all ages, including first grade, are fascinated with what goes on in the depths of our oceans. With this in mind I planned activities in the areas of math, science and language arts in such a way that the students might not even know they are learning. The shell sorting activity will teach the students classifying as well as enforce the use of a Venn Diagram in such a way that the students will think they are merely playing with shells. The two science activities--What Color Is The Ocean?, and Saltwater Evaporation--are teaching the students how to think scientifically in addition to how to conduct an experiment. Using these types of hands-on activities will help the students to better recall what the experiment was and the end results.

The sea creature research project is an introduction to the increasingly larger projects these students will be expected to accomplish is later grades. Using the topic of ocean creatures will increase the motivation level for these students to find out information. They will want to learn more about their creature so doing the research will not seem like work. This activity is also easily adapted to the varying abilities levels of the students in this classroom. Several of the students will probably write two or more pages while a couple of others will need assistance to obtain and write the required four facts.

Each lesson taught in this unit will begin with a story in keeping with the ocean theme. Some of the stories give factual information about the ocean and the creatures who live there while others are fictional stories which are set on
the ocean. The classroom library has also been stocked with books—fiction and non-fiction—with an ocean theme so the students can read independently the stories we have already read in class in addition to many others. As another means of enticing the students' curiosity there will be quite a few actual examples of sea creatures for the students to observe and ask questions about including a live hermit crab for the students to write an observation about. This ocean unit is going to be exciting for both the students and the teacher.
## Vocabulary

<table>
<thead>
<tr>
<th>research</th>
<th>number sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>fact</td>
<td>reflect</td>
</tr>
<tr>
<td>non-fiction book</td>
<td>compare</td>
</tr>
<tr>
<td>fiction</td>
<td>shade</td>
</tr>
<tr>
<td>saltwater</td>
<td>scales</td>
</tr>
<tr>
<td>evaporation</td>
<td>shimmer</td>
</tr>
<tr>
<td>addition</td>
<td>glide</td>
</tr>
<tr>
<td>subtraction</td>
<td>dazzling</td>
</tr>
<tr>
<td>equal</td>
<td>fin</td>
</tr>
</tbody>
</table>
Writing Center
Clinical Teaching Lesson Plan
Circle One: NEW or RETEACH

Grade: 5  Subject: Oceans  Standard:  Lesson Title: Rainbow Fish Art

Teacher Materials: Rainbow Fish Book, Rainbow Fish Sample, Glue, Chart paper, Markers
Vocabulary: Scales, Glittering, Slide, Tin, Shimmer
Students’ Materials: Paper plate, Soil, square, alive, scissors, Tissue paper, squares, markers

Objective: The students will be able to explain what it means to be a good friend during a whole group discussion.

Set: Today boys and girls we are going to learn about being a good friend.

Background/Input: The introduction to the Ocean Unit will have already been done. This is an extension of what lives in the ocean.

Procedure/Application:
Teacher teaches: (Visual/auditory) Teacher introduces the story and shows the vocabulary words on chart paper. Teacher asks for volunteers for definitions or provides them if no volunteers. Teacher reads story.
Students teach the teacher: (Oral/psychomotor/kinaesthetic) Students discuss what it is to be a good friend.

Guided Practice: Volunteers are asked to share personal experiences similar to the one experienced by the Rainbow Fish.
Activities: Students create their own rainbow fish to be displayed on a class bulletin board.

Independent Practice: Students practice being a good friend after school.

Assessment/Criterion: An interview assessment will take place during the activity where each student will be asked to give at least two examples of what it means to be a good friend.

Student Teacher: Karen Kubota  Master Teacher Approval: ____________________________
Date: 6/14/01
Clinical Teaching Lesson Plan

Circle One: (NEW) or RETEACH

Grade: 5th
Subject: Oceans
Standard: [Assessment Criteria]
Lesson Title: Saltwater Evaporation

Teacher Materials:
- 1 liter saltwater
- eye dropper
- masking tape
- sharpie

Vocabulary:
- saltwater
- evaporator
- lid
- data recording sheet
- saltwater

Students' Materials:
- [List of materials]

Objective: The students will identify what happens to salt water when left to sit for several days by observing trays of salt water.

Set: Today boys and girls we are going to learn what's left after the water is gone.

Background/Input: The students have already discussed the difference between fresh and salt water.

Procedure/Application:
Teacher teaches: (Visual/auditory) Discussion about what is in seawater. Teacher demonstrates activity.

Students teach the teacher: (Oral/Psychomotor/Kinesthetic) Students offer explanations for what is in seawater and for what will happen to the water when it is left out.

Guided Practice: Students record predictions on data recording sheet.

Activities: Students put saltwater on a plastic lid and let it sit for at least 7 days to see what happens. Record on data sheet.

Independent Practice: Students periodically check lids to see what is happening.

Assessment/Criterion: Data Recording sheet will be placed in portfolio. Student explanations will show that the water has evaporated and the salt is left.

Student Teacher: [Signature]

Master Teacher Approval: [Signature]

Date: 1/26/04 CE3
Salty Water Evaporation

1. With a partner, decide which of you will be responsible for the jobs below:
   Experimenter - responsible for following the given directions, gathering materials and cleaning up.
   Recorder - responsible for reading the directions out loud, reading the questions out loud and writing the answers.

2. Gather the following materials:
   - spoon
   - salt
   - paper cup
   - 1/4 cup water

3. Stir the salt into the water.

4. Put the cup in a warm place so the water will evaporate.

5. Use what you already know about science to predict:
   What do you think will happen to the water? ______________________
   What do you think will happen to the salt? ______________________

6. Check the cup in a few days and record:
   What has happened to the water? ______________________
   What has happened to the salt? ______________________
   What do you think happens to ocean water when it is exposed to the sun? ______________________
   What do you think happens to the ocean salt when the water evaporates? ______________________
Clinical Teaching Lesson Plan

Grade: 5
Subject: Oceans
Standard: Science - 3
Lesson Title: What Color is the Ocean?

Teacher Materials: pictures of ocean, chart paper, markers
Vocabulary: reflect, compare, shade

Student's Materials: water glass, data recording sheet, salt water, construction paper, squares

Objective: The students will demonstrate why ocean water looks blue, gray, or black by doing a simple experiment.

Set: Today boys and girls we are going to learn why the ocean looks blue.

Background/Input: Part of an ongoing unit on oceans. Answers a kid's question.

Procedure/Application:
- Teacher teaches: (Visual/auditory) Teacher shows students pictures of oceans which have different colors, and asks the students to tell what color they are. Students are asked for explanations for the color. Teacher records responses.
- Students teach the teacher: (Oral/Psychomotor/Kinesthetic) Students give answers for what colors oceans are and why they are what color.

Guided Practice: Students and teacher go step by step through the activity. Student fill in predictions on data recording sheet.
Activities: Students use glasses of saltwater and colored construction paper to simulate clouds coloring the ocean.

Independent Practice: Students record findings on data recording sheet.

Assessment/Criterion: (Tie-in with objective) In a portfolio, students' responses will demonstrate an understanding of concept.

Student Teacher: Karen Yuzek
Master Teacher Approval: ____________________________
Date: 6-14-01
Clinical Teaching Lesson Plan

Circle One  NEW or RETEACH

Grade 1st  Subject Oceans  Standard Math  Lesson Title Marine Math

Teacher Materials
manipulatives  Marine Math transparency

Vocabulary
addition  subtract  equal  number  sentence

Students' Materials
Marine Math page

Objective: The students will calculate the answers to word problems involving addition, subtraction, less than, greater than.

Set: Today boys and girls we are going to learn to read and solve story problems.

Background/Input: The students have studied concepts using numbers.

Procedure/Application:

Teacher teaches: (Visual/auditory) Teacher uses overhead to explain page as well as thinking out loud to solve problem.

Students teach the teacher: (Oral/Psychomotor/Kinesthetic) Students explain sample problems.

Guided Practice: All students complete 1 problem together.

Activities: Students complete math page

Independent Practice: Students complete pages as homework.

Assessment/Criterion: Math paper will be included in portfolio. Student papers will be graded on a percent system.

Student Teacher: Karen Kubota  Master Teacher Approval: __________________________

Date: 6-15-01
1. A star fish has 5 legs. 4 star fish are playing in the ocean. How many star fish legs are there all together? 

2. Circle one half (1/2) of the sea slugs.

3. 18 crabs were looking for food. 7 crabs crawled out of sight. How many crabs were left? 

4. Are the number of octopus <, >, or = the number of sea snails?
5. 8 mussels were joined by 16 more. How many mussels in all?

6. The sea snail leaves a trail behind as he moves on the ocean floor. Use a ruler to measure how far he has traveled in inches.

7. These crabs are getting ready for bed. The clock shows their bedtime. What time do they go to bed?

8. 23 sea worms are eating dinner. 11 more come. How many sea worms in all are eating dinner?
Clinical Teaching Lesson Plan

Circle One  NEW or RETEACH

Grade 6th  Subject Oceans  Standard  Lesson Title Sea Creature Research

Teacher Materials
- pictures of sea creatures
- research fiction
- lots of information books that
- example of non-fiction
- finished paper research book

Students' Materials
- paper
- lines on entries (broken top)
- pencil
- picture of animal books about animal

Objective: The students will organize factual information on a sea creature and prepare a one page information sheet on the creature.

Set: Today boys and girls we are going to learn how to do research on sea creatures.

Background/Input: Students have learned some info already on sea creatures.

Procedure/Application:
Teacher teaches: (Visual/auditory) Teacher chooses 1 creature as an example and finds 1 fact to write on board. Teacher talks about difference between fact & fiction. Teacher assigns creature & books.

Students teach the teacher: (Oral/Psychomotor/Kinesthetic) Students take turns giving facts to be written on board.

Guided Practice: Students return to seats and everyone finds, writes & shares 1 fact.

Activities: Students complete 1 page of facts in complete sentences (other pages if necessary) and an illustration of creature.

Independent Practice: Students find and write facts.

Assessment/Criterion: Written pages will be assessed using the standard district rubric for non-fiction writing. All pages will be laminated & bound into a class book.

Student Teacher: [Signature]

Master Teacher Approval: [Signature]

Date 6-15-01
Activities

Rainbow Fish Art

This activity begins with the teacher wearing shiny foil “scales” as the children come in from recess. As the students inquire about the “scales” the teacher will reply “Aren’t they beautiful? They are all mine!” The teacher will then read The Rainbow Fish by Marcus Pfister and lead a discussion on what it means to be a good friend. Students will relate events in the story to events in their own lives as they give examples of what it means to be a good friend and what they can do on a daily basis to be a good friend. The discussion will be concluded with a student or the teacher suggesting what she should do with her foil scales which will lead directly into the directions for rainbow fish art with each student including one of the teachers foil “scales” on their rainbow fish. The rainbow fish will be displayed on the class “Ocean” bulletin board.

Saltwater Evaporation

The reading of The Earth Is Mostly Ocean by Allan Fowler kicks off this lesson by introducing the students to the fact that the water in the oceans is different from water lakes, rivers and kitchen faucets. The teacher will lead a discussion about the differences and similarities and chart them on a Venn Diagram as a way of introducing the Venn Diagram. The teacher will guide the discussion towards the salt in the water and what would happen if all the water evaporated—students will be asked to give explanations of evaporation. The students will make and record predictions about what will happen and then prepare their evaporation experiments. The following day the students will look at their experiments, discuss, and record the actual results.

What Color Is The Ocean?

Several color pictures of the ocean will be displayed as this activity begins. The discussion will center around the many different colors of the oceans and why that is so. Predictions will be made by the students and recorded. The experiment will be explained and conducted with the results recorded by each student.

Marine Math

The students will complete a page of story problems all of which involve sea creatures. The problems and strategies for solving them will be demonstrated by the teacher using an overhead projector. The students will
complete at least one problem together and then complete the remainder in pairs with help from the teacher as needed.

**Sea Creature Research**

The books *Coral Reef* by Barbara Taylor and *Tide Pool* by Christiane Gunzi will be introduced and read in part. The many different sea creatures covered during the first part of the week will be reviewed. Instructions for the research project will be given and an example page will be completed to show how the information is gathered. Students will choose their research topic by picking a card out of a sand pail. Whatever card they choose will be the creature they do research on. Students will complete at least four sentences as well as a detailed illustration of their creature. The completed pages will be bound into a student book to be put into the class library.

**Literacy and Math Centers**

**Ocean puzzle/Phonics Books**
Students will spend part of the period working the puzzle and the remaining time reading familiar phonics books.

**Sea Creature Concentration**
Students will play a game of Concentration which uses only pictures of sea creatures to be matched.

**Listening Center**
Students will listen to and read along with Down By The Bay by Allen Daniel and then write their own verse for the song.

**Writing Center**
Students will write as much as they can about the subject of oceans using a word ring of ocean vocabulary words to help with spelling as well as ideas.

**Shell Math**
Students will use numbers as well as “+” and “-” symbols written on shells to create addition and subtraction number sentences. The number sentences will be recorded with the students writing in the correct answers.

**Observation Journal**
Students will observe a live Hermit crab in the classroom and record what they see in a journal.

**Library**
Students will read books with an ocean theme as well as other books from the classroom library while sitting in a beach chair.
Shell Sorting
Students will sort a variety of sea shells in various ways and record how the shells were sorted.
Bibliography


