



"Under The Sea" Lesson Plans

Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year Olds, 2007.

These standards are beacon lights for my curriculum. I adapt them according to the ability of my students. I use them as goals to strive towards or as background building for my students' future learning. These goals are my focus, but they are not the only objectives being utilized by the following lessons. Language and social goals are incorporated into daily routines.

I. Virginia Foundation Blocks for Early Learning

1. Scientific Investigation, Reasoning and Life Processes

- a. Identify basic properties of objects by direct observations
- b. Describe objects using pictures and words
- c. Separate a set of objects into 2 groups according to physical characteristics.

2. Life Processes:

- a. Describe what living things need to live (Environment: water or land / food)
- b. That "baby" animals are similar but not identical to parents and to one another.

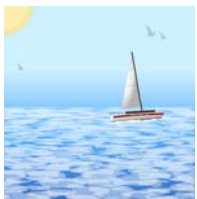
* Virginia SOLs (Life Processes, K.6; Science-Matter, K-5; Scientific Investigation, The Five Senses, K-2)

II. Concepts to Teach and Corresponding Activities

(Use your discretion to teach according to children's abilities)

1. -A Ocean

- The ocean is salt water
- The ocean is very, very deep
- The ocean is very, very big
- Lots of animals and plants live in the ocean
- Sandy beaches are typically by the ocean
- Sea shells can be found on the beach
- People like to swim or play in the ocean
- Boats float or use motors to travel on the water
- Special boats called submarines move below the water



I. Concepts to teach and corresponding activities:

1-B. Ocean Activities:

Questions to ask? If child is able to comprehend

Why is the ocean blue? colors from the sky reflect in the ocean and take it color like a mirror.

What causes ocean waves? the wind

Why is the ocean salty? all land water empties salt into the ocean, and it stays as it has no where to go so the water is salty

Experiment:

2 clean jars fill both with water: add salt to one, leave other plain. place a raw egg in the salt water, it will float, but sink in the fresh water

- **Make an ocean in the bottle:** clean soda bottle, fill the bottle $\frac{1}{2}$ full with water o, add blue or blue green food color, and fill almost full with mineral oil (leave about 1 or 2 inches to the top of bottle. Hot Glue lid or use rubber cement in the lid. Close lid tightly.
- Salt water painting; mix 1 cup warm water with 6 TBS salt, put in small baby food jars, then add 3 drops of food coloring , paint pictures using the salt water. It will dry like sand
- **Ocean or Beach picture:**
 - Fold a paper into 3 parts
 - Color top part Blue using a crayon
 - paint the middle part blue with finger paint , can add texture by using a sponge for the ocean Show the children how to move the sponge up and down to make waves
 - add stickers to ocean water when dry
 - Color the bottom portion brown; glue on sand(I have the children use a paint brush with watered down glue)
 - One can be very creative by adding on pieces of old towel cut like a beach towel, add a drink umbrella for a tiny beach umbrella.
- **Water Properties: Sink and Float Activity;** Have each child predict whether each item chosen to put in water will sink or float.
 - Read "Who Sank The Boat?" by Pamela Allen
- **Pirates treasure chest:** Color picture and add on fake jewels
 - *Hint: Color books are great resource for great pictures and activities
- Beach is made up of sand (crushed up rocks make sand over many years)
- Beach Bag:

- 2 large sheets of construction paper ;
- Lace the sheets together with yarn and keep top open
- Staple handles on

II. Concepts to teach and corresponding activities:

1-B: Beach/Ocean

- Decorate the outside; This will be a good project to hold all the children's work
- Beach Bag : Bring in a beach bag and let each child pull out an object that one could take to the beach (suntan lotion, swimsuit, flip=flops, sunglasses, hat)
- Beach Pail: Cut out an outline of sand pail

II. Concepts to Teach: (use your discretion to teach according to children's abilities)

2-A. Beach and Seashells Concepts Continued:

- **Sea shells are:**
 - Different sizes and weight
 - Different shapes
 - Different colors
 - Different textures

2-B. Activities:

- **Sort** according to shape and size
- **Listen to the sea** in the shell
- **Match picture** to sea shell
- **Match shells** that are alike * I have several shells that look the same
- **Hide and seek:** find the seashells in sand table - then match shell to picture. (I took pictures of the sea shells that I collected so the children could exact match.
- **Math Ideas** with the shells:
 - Size comparison (big/little)
 - Weight comparison
 - Counting how many
 - Add and subtract with objects
- **Pearl of Great Price:**
 - **Take a fan shaped shell** (I have found them at the Dollar Store) and paint them with finger polish or with school paint. When dry glue in a fake pearl (one necklace for a 1.00 usually is enough for the class)
 - **Paper Plate Clam Shell with a pearl**
 - Decorate a small paper plate on both sides
 - Cut a small paper plate in half and line up the curved sides together.



II. Concepts to be taught and the corresponding activities

2-B Seashells continued:

- **Paper Plate Clam Shell** with a pearl continued:
 - Hole punch holes on the back side (the flat ends) and thread yarn through it.
 - Glue a fake pearl inside

- **Shell prints:**
 - Either make your own clay recipe (one will be at the end of plan) or buy Crayola white or colored fast dry modeling
 - Give each child a small amount of clay.
 - Have them manipulate it until it pliable, and
 - Then make the print: If it's white, it can be painted when dry or the colored clay is wonderful too. Depending on the child's fine motor skills and teachers' art resources





II. Concepts to be Taught and Corresponding Activities

3.-A Fish Concepts

- Fish breathe in water
- Fish swim
- Fish jump
- fish eat
- baby fish hatch from eggs

How Fish and People are Alike and Different

Fish 	Both	People 
1. Have Scales	* Have Eyes	1. Have Skin
2. Tail move side to side	* Have a Mouth	2. Have Legs
3. Has fins	*Breath Air	3. Have Arms
4. Breathe air in water (gills)	*Move	4. Breathe air on land 5. with lungs (can't breathe in water)
5. Constantly moves		5. We need to rest,
		sleep, work and play

3.-B Fish Activities:

- **The Fisherman's Wife's Puppet Fairy Tale:**
 - Retell the story with much expression
 - Make fish puppets (pattern will be included in Patten section)
- **Rainbow Fish:**
 - Read the Story and discuss sharing and friendship

II. Concepts to be Taught and corresponding activities:

3-B Fish: Rainbow fish continued

- Take a variety of fish color sheets and let the children choose which fish to color or paint.
- Add on a sparkling disc (package of sequin disc can be found in craft or sewing section of most discount stores). Now you have lots of friends.

<http://www.ccartwright.com/h10f.html> (sample of what to look for- Wal-Mart or Craft Stores sells them

- **Fish in Fry Pan**
 - Use a fish cut out and have children color the fish
 - Cut out a black skillet and glue the fish to skillet
 - For fun taste fish if children don't have an allergies

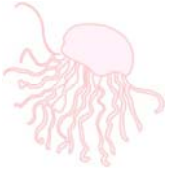
II. Concepts to Teach and Corresponding Activities

3.-B Fish Activities Continued:

- **Fish Prints;**
 - Buy a fish with head on it, keep it cold and then let children paint prints with it. (then carry outside to garbage can)
 - Discuss what the fish looks, feels and smells like
 - When finished, carry fish outside to garbage to get rid of 'fishy' smell from classroom
- **Catch of the Day: (Stuffed Paper Fish)**
 - Cut out a large outline of a paper fish. (Bulletin board works great)
 - Hole punch the around the fish
 - Have the children sew the fish together with yarn , leaving a small area open
 - Children stuff the fish with pillow stuffing, and the teacher helps children close up the fish and tie it closed.
 - Mount it on an oval shaped paper with staples or tape on the back of fish
 - Title the mounted as " _____Fish"
 - Display the fish with a sign that says, "Catch of the Day"

- **School of Fish**
 - Read the story "Swimmy" by Leo Lionni
 - Draw a medium sized fish and give each child a handful of fish crackers and one green cracker for the eye. Glue the fish on the outline. Be sure to give the children enough crackers so they can eat, or none of the crackers will make it onto the fish outline.
 - Large fish outline and have each child add there fish to the large fish shape and make one fish the odd colored one for the eye
- **Sponge Paint Fish:** If you don't have sponge fish, you can make your own with a large sponge, draw a fish outline then cut it out.
- **Fish Bowl:** I read a Fish Out of Water by Helen Palmer
 - Draw a fish outline with a blue center (samples will be in the pattern section)
 - Use green crayons to draw sea weed
 - Glue on colorful fish gravel in the bottom
 - Then finally add sticker fish
- **Tropical Fish Pins:**
 - Cut out various tropical fish shapes from card stock
 - Decorate
 - Laminate and hot glue a jewelry pin to the back
- **Dazzling Tropical Fish;**
 - Have a fish outline in construction paper
 - Crumple foil then lay out foil
 - The children paint foil paper different colors of paint
 - Either the teacher or children cut into squares the dried painted foil paper
 - Glue foil squares for scales onto the fish outlines
- **Triangle Fish:**
 - Make a fish out of 2 or 3 Triangle shapes
- **Crayon Resist Fish:**
 - Draw fish with crayons and color them in
 - Use watered down blue paint and paint over the colored fish
- **Flashy Fish:**
 - Paper outline of a fish
 - Cut streamers into 2 inch long narrow pieces for the tail
 - Cut out tissue paper squares or tear the paper and glue it on the paper fish
 -

The patterns I use for the rest of the unit come from Dollar Store Color books and From the Preschool Mailbox magazine: June/July, 1991. I know units can be purchased from past issues, but do not know if one can purchase from an issue that old. The past units I purchased had been approximately \$5.00



II. Concepts and Associated Activities:

4-A. Jelly Fish Concepts

- Floats in the ocean
- Eats fish
- Its sting can hurt swimmers
- Enemies are bigger fish and Sea Turtles

4-B Jelly Fish Activities:

- **Color sheets:** color
- **Jellyfish Project**
 - Color an outline of jelly fish head purple,
 - Hole punch holes on the bottom
 - Add yarn or curling ribbons for tentacles
 - Thumbprint white paint on the jellyfish



5-A. Octopus Concepts:

- Has blue blood and 3 hearts
- Good eyesight
- Lives in dark caves
- Can change colors
- 8 Arms: will grow another arm if one is damaged or cut off
- Eats crabs, scallops, snails, fish and turtles
- Hunts at night time
- Secret weapon: special medicine "poison" that will stop its food, so it can eat

5-B Octopus Activities

- **Color Sheets:** color
- **Octopus Project.**
 - Use a simple outline of an octopus
 - Color or paint it green or cut its shape out of green construction paper
 - Use a spray bottle to spray watered down white paint onto octopus
 - Put white packing peanuts on arms for suction cups
 - Add marble eyes

*prop: I have a plastic octopus



6.-A Sea Horse Concepts;

- It is a small fish with armored bodies
- Lives among the seaweed in warm waters
- Eats shrimp

6-A Sea Horse concepts continued

- It's the only animal that the Daddy carries the seahorse babies in a special pouch until born

6-B Sea Horse Activities

*Read "Mister Seahorse" by Eric Carle

- **Color Sheets:** color or paint
- **Sea Horse Project**
 - Cut out a simple seahorse shape from orange construction paper
 - Give it button eye
 - Cut out brown squares of tissue paper for children to glue on or let them tear tissue paper to glue on the body
 - Take a colorful streamer and fold it into a fan and staple it onto the cutout for its stiff spine

*Prop: I have 2 small dried sea horses for children to examine



7-A. Sea Star Concepts

- Spiny, hard skinned animal
- Its shape is a star; 5 arms or rays
- Lives on the ocean bottom
- Lots of tiny tube feet
- Its stomach pushes out of its body to eat, so its stomach is its mouth
- Sea stars eat clams , oysters , coral and fish
- Come in many sizes (large , small, tiny)
- Come in a variety of colors: red, purple, blue, green, yellow , brown and orange

7-B Sea Star Activities

- **Color sheets:** color
- **Sea Star Project**
 - Black line sea star pattern
 - Children color the sea star any of the colors that the sea star can be (orange, red, green, blue, purple and yellow)
 - Add gravel eyes
 - Cover the star fish with a round cereal
- **Sandy Star:** Sea star outline, add glue with a paint brush and sprinkle w/ sand

- **Patrick Star Color sheets:** Color
 - **Patrick Star:** Cut out a pick star shape then let children draw face
- *Props: I have a variety of sea stars for children to touch and ex



8-A Sponge Concept

- Lives attached to a part of the ocean
- Variety of shapes and color
- Eats tiny plankton
- Water pours in and out of its body (porous)

8-B Sponge Activities

* Watch episodes of Sponge Bob Square Pants

www.nickjr.com has games and activities for children to play

- **Color sheets:** color
- **Sponge Bob Sponge:**
 - Cut out yellow sponges into a square
 - Add Wiggle eyes
 - Draw on nose and mouth
- **Sponge Bob Picture:**
- Yellow Construction Paper
- Draw on facial features
- Draw circles on pictures to make it porous like a sponge.



9-A Hermit Crab and Crab Concepts

- Lives on the ocean floor
- He does not have a very hard shell
- Variety of colors: red, brown and purple
- Eats plants and dead animals
- Uses another shell for its house
- When the Hermit Crab outgrows its shell, it moves on until it finds a larger shell to live in

9-8 Hermit Crab and Crab Activities

- **Hermit Crab Color Sheets:** Color
- **Crab Color Sheets:** Color
- **Crab project:** found in Preschool Mailbox June/July, 1990 issue
 - Use a simple outline of a crab
 - Color or paint it the colors that crabs can be
 - Thumbprint blue on the crab

- Cut individual cups from egg cartons and staple on onto the front for claws

9-B Hermit Crab or Crab activities

- **Hermit Crab House Project:** Read a "House for Hermit Crab" by Eric Carle
 - Begin with a line drawing or picture of a large shell
 - Then cut out or draw a front portion of a Hermit crab to put in your shell
 - Then add on clip art of the things that Hermit crab put onto his shell house
 - The following: lantern fish (I used yellow highlighter to make circles on the fish for neon lighting), a snail, coral, sea urchin, sea anemone, star fish and on the bottom draw grey or brown circles for rocks to anchor his house

10-Shark Concepts to be taught

- Constantly move or will die
- Skin feels like sandpaper
- Eats everything except a puffer fish
- Has big teeth like knives
- Can be either big or little

10-B Shark Activities

- **Shark Skin:** Show the children a piece of sandpaper to touch lightly as it resembles a shark's skin
- **Color sheet of shark:** Put sandpaper under the color sheet and color it with a silver crayon. It will show texture on the picture
- **Color sheets:** color

11-A Whale Concept

- Skin feels like soft rubber
- Tails move up and down
- Breathes air, has to come to the surface to breathe
- Has a breath hole on top of its head
- Fins look like baby fingers
- A mammal: Baby born alive and nurses mother whale's milk
- Can eat either other fish or plants
- Make sounds to communicate with other whales
- Largest animal in the ocean



Whale

Babies born alive
Breath w/ a blow hole

Both

Live in Water
Move
Eat same food

Fish

Babies begin as eggs
Breath with gills

11-B Whale Activities

- **Color Sheets:** color
- **Whale Booklet:** (color) from Preschool Mailbox ;June/ July, 1992 (past units can be obtained for approximately \$5.00)
- **Whale Project:**
 - 1 sheet of blue construction paper per child
 - cut out a whale shape out of grey construction paper and use a brad to attach it to the paper
 - Glue blue paper streamer that you help the child twist like waves on each side of the paper
 - Move the whale up and down as it swims in the ocean

III. Book to Read:

1. Concept Teacher Made Books by Teresa Williams

*Fact Books of the following:

- Under the Sea Facts about the Ocean
- Fish, Fish, Fish!
- Facts About Crabs
- Sea Star Fact Story
- Jelly Fish Fact Story
- Octopus Fact Story
- Sea Horse Fact Story
- Sh- Sh- Sharks!
- A Whale of a Tale!

Additional Theme Related Stories by Teresa Williams of Finger Plays put into story format

- *Mermaid, Mermaid What Do You See?* (Based on *Brown Bear, Brown Bear*)
- *In The Deep Blue Sea* (color identification)
- *There Once Was A Giant Fish* (poem by Lucia Kemp Henry)

2. Additional Books:

- What Can You Do in The Sun by Anna Grossnickle Hines
- Baby Mickey's Book of Opposites by Golden Book

- Barney's Sand Castle by Stephaine Calmenson
- Busy Beach by Rebecca Finn
- Spot Goes to the Beach by Eric Hill
- Just Grandma and Me by Mercer Mayer
- The Bear's Vacation by Stan and Jan Berenstain

2. Additional Books continued:

- Down to the Beach by May Garelick
- Who Sank the Boat? by Pamela Allen
- Nature Hide and Seek Oceans Book by John Norris Wood
- Now I Know What's Under the Ocean by Janet Craig
- Way Down Deep in the Deep Blue Sea by Jan Peck
- Fish Out of the Water by Helen Palmer
- Nemo Hide and Seek Sound Book by Susan Brooke
- Finding Nemo: The Best Dad in the Sea by Amy J. Tyler
- The Rainbow Fish by Marcus Pfister
- Blue Sea by Robert Kalan
- Swimmy by Leo Lionni
- Fish Eyes: A Book You Can Count On by Lois Ehlert
- Mister Seahorse by Eric Carle
- House For Hermit Crab by Eric Carle
- Sea Creatures: A Magnet Book by Phidal Publishing
- Now I Know Dolphins and Porpoises by Sharon Gordon
- Surprising Sharks by Nicola Davies
- The Very Silly Shark: Peekaboo Popups by Jack Tickle

IV. Additional Activities:

1. The Little Mermaid: Real or Pretend "Make Believe"

- Watch the Little Mermaid Movie by Disney
- Color Sheets : Color

2. Gummy Fish or Sweedish Fish Graph (see sample in patterns section)

- Make a graph according to color
- Give a handful of gummies to children
- Sort by color , then count them and finally eat

3 Sand castle pictures:

- Use small blocks: 1 rectangle, one arch, and one triangle.
- Paint the blocks brown and make prints in the shape of a castle
- Add sand while the paint is wet- instant sand castles

4. Sand and Sea Jar:

- Clear plastic bottle
- Layer the bottle with layers of rocks, shells sand and water

5. Swirling Water:

- Use a turkey roasting pan or long cake pan- fill with water
- Add oil based blue paint to the water: swirl water
- Place paper in water
- Glue paper boat or fish on picture when dry

6. Sand Art:

- Corrugated cardboard, liquid starch, sand, powdered paint/or glitter until covered.

7. Toothed Whale Activity:

- Put sand and water in a shallow pan
- Add some small objects
- Use a large toothed comb to comb through the water like a whale

8. Sea Urchins:

- Use clay or salt dough play dough on paper plates and paint.
- Stick it with small toothpicks
- Let it air dry over several days

9. Picture me by the Sea:

- Either buy a picture frame or make one with large craft sticks glued onto heavy cardstock.
- Decorate the frame or paint it
- Finish Decorating frame with small sea shells
- Insert a picture of student
- Back it with heavy cardstock paper

V. Poems or Finger Plays;

Sea Star

Sea Star, sea star

In my hand

It feels like you are covered in sand

Unknown

Mermaid, Mermaid (Also a game: Say the poem and child name ocean animal)

Mermaid, Mermaid

What could it be?

Moving close by in the deep blue sea

Unknown

Five Little Fishes

5 little fishes went swimming one day

Over the hill and far away

When the mommy fish called,

"Come back, come back"

Only 4 little fishes came swimming back

Continue with 3, 2, until 1 little fish came swimming back----

1 little fish went swimming one day

Over the hill and far away

When the mommy fish called,

"Come back, come back"

No little fish came swimming back

Then a great whale came swimming past and all 5 fishes swam back so fast.

Unknown

Did You Ever See a Fishy? (To the tune of "Have You Ever Seen a Lassie?")

Did you ever see a fishy?

A fishy, a fishy

Did you ever see a fishy

Swim this way and that way

Swim this way and that way

Swim this way and that way

Did you ever see a fishy?

Swim this way and that way

You can substitute swim with:

-swish?

-slide

-splash

VI. Games

- Play a memory game with what is packed in the Beach Bag or Guess What is the Beach Bag
- Sort Shells
- Go Fishing with play fishing poles
- Go Fish Card Game
- Ocean Bingo Game found at the website below: Use small sea shells for markers
www.preschoolprintables.com/bingo/bingo.shtml
- Floor Game: Exact Match Ocean Animals ; 2 pictures of the ocean animals the children match the pictures.

VII. Drama Center Props:

- Small wading pool
- Place plastic fish in pool and use child fishing poles to fish
- 2 Small lawn chairs
- Sand and Water table and accessories
- Sea Shell Center
- Child Size Grill
- Child Picnic Basket with play food and dishes
- Beach Bag with props (sun lotion, sun glasses, and beach towel)
- Reading center with themed related books and sea animal toys (SpongeBob Square Pants, Dolphin, Rainbow Fish, Beany Shark, Fish, Sea Turtle, Hermit Crab in Shell, & Crab).

IX. Food or Recipes

1. Cinnamon Sea Shells

Ingredients:

- refrigerator crescent rolls
- Soft margarine
- cinnamon and sugar mixture
- Separate dough into triangles
- Spread margarine on one side of triangle
- Sprinkle the sugar mixture over the margarine
- Roll the triangle into a spiral, like a seashell
- Bake and drizzle with icing before eating

2. Swimmy:

Ingredients: bread and spread (peanut butter, jelly and cheese spread?)

- Cut bread into triangles
- Spread it with spread of your choice and enjoy

3. Sand Cups:

Ingredients: vanilla wafers, vanilla pudding, gummy fish and a clear cup

- Crush up the vanilla wafer for sand
- Add vanilla pudding (you can add blue food color if child will eat it that way)
- Add gummy fish to top

4. Boats:

Ingredients: Naval orange halves (with orange removed), blue jell-o, gummy fish

- Cut the orange in half
- Make blue jell-o with gummy fish inside

5. Sea Foam Candy:

2 c. brown sugar

1 c. water

2 tbsp. white syrup

2 egg whites

Mix all but egg whites. Bring to boil slowly until forms a hard ball. Beat egg whites until stiff. Pour syrup slowly over egg whites, beating continually until mixture holds shape when dropped by spoonfuls onto wax paper .

X. Online Resources:

Fish color sheets online:

<http://www.preschoolcoloringbook.com/color/cpfish.shtml>

http://www.freeprintablecoloringpages.net/category/In_The_Ocean

<http://www.lafishmag.com/clipart.html>

Treasure Chest color sheet

www.enchantedlearning.com/crafts/box/treasurechest/

www.coloring.com/color/tt_treasure_chest (color online activity)

Online story: The Fisherman's Wife

www.ongoing-tales.com/SERIALS/oldtime/FAIRYTALES/fisherman1.html

<http://www.first-school.ws/activities/fairytales/fisherman-and-his-wife.htm>
Ocean Creatures
<http://www.4kraftykidz.com/Oceancoloring.html>
<http://disney.go.com/magicartist/coloring/nemo/index.html>
(finding Nemo)
<http://coloringbookfun.com/sea/>
www.geocities.com/Heartland/6459/ocean.html
Jellyfish
www.afunk.com/jellyfish/index.html
Crab
www.afunk.com/crab/
Shark
www.afunk.com/shark/page3.html
Seahorse
www.afunk.com/seahorse/
Octopus
www.afunk.com/octopus/
Hermit Crab
http://homeschooling.about.com/od/freeprintables/ss/crabprint_9.htm
http://www.montereybayaquarium.org/lc/kids_place/activities/pnd_print_hermit.html
SpongeBob
<http://coloringbookfun.com/spongebob/>
Whale and Shark pictures
www.thecoloringspot.com
Free Worksheets
http://www.learningpage.com/free_pages/galleries/oceans.html