

RESEARCH STATION

MARINE EDUCATION CENTER

SCIENTIFIC INQUIRY

WATER QUALITY PROJECT

- Identify questions suitable for generating a hypotheses (5-1.1)
- Identify independent (manipulated), dependent (responding) and controlled variables in an experiment (5-1.2)
- Plan and conduct controlled scientific investigations, manipulating one variable at a time (5-1.3)
- Use appropriate tools and instruments (5-1.4)
- Construct a line graph from recorded data with correct placement of the independent (manipulated) and dependant (responding) variables (5-1.5)
- Evaluate results of an investigation to formulate a valid conclusion based on evidence and communicate the findings of the evaluation in oral or written form (5-1.6)

EARTH SCIENCE

TOUCH TABLE

- Demonstration how the natural processes (weathering, erosion, deposition, landslides, floods) affect the earths oceans and land in a constructive and destructive way. (5-3.1)
- Explain how waves, currents, tides and storms affect the geologic features of the ocean shore zone. (beaches, barrier islands, estuaries, and inlets. (5-3.4)

OBSERVATION

- Compare the movement of water by waves, currents and tides (5-3.5)
- Explain how human activity (including conservation efforts and pollution has affected the land and the oceans of the earth. (5-

PHYSICAL SCIENCE

SALINITY DEMONSTRATIONS

- Demonstration how the natural processes (weathering, erosion, deposition, landslides, floods) affect the earths oceans and land in a constructive and destructive way. (5-3.1)
- Explain how waves, currents, tides and storms affect the geologic features of the ocean shore zone. (beaches, barrier islands, estuaries, and inlets. (5-3.4)

OBSERVATION

- Compare the movement of water by waves, currents and tides (5-3.5)
- Explain how human activity (including conservation efforts and pollution has affected the land and the oceans of the earth. (5-

LIFE SCIENCE

OBSERVATION & DISCUSSION

- Summarize the composition of an ecosystem, considering both biotic, factors (including pollutions to the level of microorganisms and communities and biotic factors.
- Compare the characteristics of different ecosystems including estuaries/salt marshes, oceans, lakes and ponds, forests and grasslands (5-2.3)
- Identify the roles of organisms as the interact and depend on one another through food chains and food webs in an ecosystem considering, producers and consumers (herbivores, carnivores and omnivores) decomposers (microorganisms, termites, worms and fungi) predators and prey, parasites and hosts (5-2.4)
- Explain how limiting factors (including food, water, space and shelter) affect populations in ecosystems (5-2.5)