Memory Draw

Activity: To be conducted by classroom teacher prior to and during class Aquarium visit.

Goal: Students will use the scientific method to structure an investigation. Students will engage in a focused observation, and create a drawing. Students will revise and present the results of their investigation.

PreKindergarten Developmental Profile Indicators
Scientific Development
PK-CS-L1 – Explore, observe, and describe a variety of living things

Louisiana Standards and Benchmarks
SI-E-A1 – Asking appropriate questions about organisms and events in the environment
SI-E-A2 – Planning and/or designing and conducting a scientific investigation
SI-E-A3 – Communicating that observation is made with one's senses
SI-E-A4 – Employing tools and equipment to gather data and extend the sensory observations
SI-E-A6 – Communicating observations and experiments in oral and written formats
SI-E-B4 – Developing explanations by using observations and experiments
SI-E-B5 – Presenting the results of experiments
SI-E-B6 – Reviewing and asking questions about the results of investigations

CE-1VA-E1 – Exploring imagery from a variety of sources and demonstrating visual representation
CE-1VA-E2 – Exploring techniques and technologies for visual expression and communication
CE-1VA-E5 – Working individually and as a group member in a responsible and productive manner
CE-1VA-E6 – Understanding relationships among the arts and other disciplines outside the arts

Materials:
Drawing paper
Pencils, crayons, colored pencils
Clipboards

Background:
If you look closely enough, you'll realize that even the most "ordinary" things around you are fascinating. Observation is a corner stone of science. Observation prompts people to ask questions, and it helps to answer questions. Observation involves closely inspecting things. It involves seeing and sensing through careful analytic attention. It's all about coming to know and understand something by putting together all the information that you can collect through direct experience.

Procedure:
Drawing on memories, associations or conceptions gives us images that need to be tested against reality. This simple exercise recreates the scientific method. The drawing, done from memory, parallels creating a hypothesis. In comparing their conception to the real animals, students test their hypothesis and discard what is in error.

Ask a question and create a hypothesis: Before an Aquarium visit, assign students an animal they will see at the Aquarium (shark, penguin,etc.) to draw from memory. What might the animal look like? Have you seen this animal before?

Collect data and compare findings: At the Aquarium, students compare their drawings of the animal to the real one through a focused observation. Students decide where they were right, and where they made mistakes. Students make a second drawing while at the Aquarium while conducting this focused observation.

Draw conclusions and present results: Back in the classroom, students will finish up their drawings, and present their before and after pictures to the class.

Discuss with students the way that scientists think and work. Share prints and paintings of animals and insects with your students by a variety of artists. Explain that the American artist John James Audubon painted more than 400 pictures of North American birds! He made many preliminary sketches based on close observations. It was important to Audubon that his paintings were accurate in detail and color.

Extension Idea:
On a trip to the Aquarium have each student select an animal and think of clues for the class to guess their animal. The clues cannot have the animals name in them, instead of naming the animal, the students will come up with clues that describe the animals based on their own observations.