

## Patterns, Patterns, Patterns

### **Purpose:**

This lesson provides students with the opportunity to recognize and identify patterns in nature, as well as identify the need and importance of those patterns in the animals they are observing.

### **Curriculum Match:**

For Curriculum Match visit:

<http://www.vanaqua.org/education/LearningOutcomesandIRPCConnections.pdf>

Direct experience is the basis of human learning

- Students should be provided opportunities to develop an aesthetic appreciation of the environment

(Taken from Appendix C: Cross – Curricular Outcomes)

\*\* Adapt to best suit your grade level.

### **Materials:**

- paper
- pencil
- colored pencils or pens
- clipboard or binder (hard surface to write on)

### **Background Preparation:**

Students should have some background knowledge about patterns and looking for patterns in nature. Discuss different patterns and how they might help animals survive. Introduce students to the terms camouflage, cryptic coloration, counter-shading and any others that may help students determine the survival effects of an animal's pattern.

### **Procedure at the Aquarium:**

Have students explore the aquarium and choose an interesting marine animal and look carefully at the different kinds of patterns that are found on its skin, scales, or shell. Pay special attention to small details, texture and color (shades). 'Zoom – in' and draw (colour) a small part of the marine animal, concentrating on any patterns that are found on the animal. Once they have identified the pattern, have them find at least two more animals with the same type of pattern, and draw those as well. Make sure the students identify the animal the patterns came from. If there is time, do a second pattern and compare the two patterns.

### **Extensions:**

Have the students to discuss what they think the animal would feel like if they could touch it. Have them explain their thinking, be detailed and specific. Have the students write or discuss how they feel the animal's

patterns help it to fit in to its environment. Have students make up questions about the animal they have chosen (in regards to its pattern).

**Assessment:**

Use an observation sheet to assess students as they work; showing evidence that they:

- Follow directions
- Are able to recognize and recreate patterns
- Can differentiate between different patterns
- Can recognize how patterns are essential for some animals survival
- Able to formulate well thought out relevant questions