

Water Colors

Taken from Fifer, F. & Ledbetter, C. (2000). *Penny Ante Science*®. Dallas: SCE Associates.

Use these **extensions** to inspire your own creativity to integrate these activities into your present curriculum.

Ecology: Light is critical in the growth of plants and other organisms that live through the use of photosynthesis. Corals have microorganisms in their cells that use photosynthesis to produce food, some of which helps nourish the coral polyps. As you go deeper and deeper into the ocean, corals become less frequent. How does runoff from land along the coast impact the growth of corals?

Geology: Corals are actually animals that secrete calcium carbonate around their bodies, building their home on the ocean floor. These massive coral communities continue to build, one on top of the other, until they reach the surface of the ocean. The change of ocean level changes the environment in which the corals can live. Massive coral reefs are the foundations of certain mountain chains. How did the corals get on top of the mountains? Why are coral atolls rather circular? What factors influence the opacity of mineral crystals? The optical properties of many rocks and minerals are studied in thin section.

Humankind: Diving and snorkelling in the oceans brings us into close contact with the coral communities. These communities are dependent on light from the sun to remain healthy. How do resort communities impact the health and growth of coral communities?

These detailed **correlations** indicate direct applicability to specific standards; others may be implied.

Texas Essential Knowledge & Skills (TEKS)*	K-2	3-6	6-8	IPC, Biology, Chemistry, Physics	Aquatics, Astronomy, Environmental, GMO
			7.1, 3, 4, 5 8.1, 3, 4, 5, 10, 12	IPC.1, 3, 5, 7, 9 Physics.1	Aquatics.1, 3, 6, 9, 10 GMO.1, 10, 11

* Compiled from Ledbetter, C. (2000) *TEKSing through Penny Ante Science*®. Dallas: SCE Associates. Specific listing within any category pre-supposes applicability to the general process TEKS for each area.