

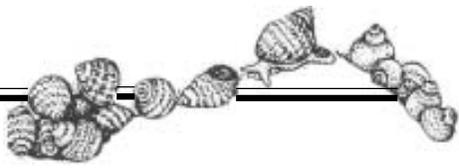
How are the ACE activities aligned with the Alaska Science Standards?

Alaska Coastal Ecology learning activities address a number of the Alaska State Science standards. The standard may be met in an age-appropriate way during the course of the field trip, but additional classroom activities and an assessment of learning are recommended to determine if students have met the standards.

Alaska State Content Standards

ACE Activity	A					B					C			D				
	4	7	9	12	14	15	1	2	3	4	6	2	3	5	1	3	6	
Field Trips																		
Intertidal Discovery Hike	*	*		*	*		*											
Coastal Monitoring				*	*	*	*	*	*			*					*	
Forest Discovery Hike	*	*		*	*		*											
Forest Transects				*	*	*	*	*	*			*					*	
Stations																		
Live Tanks				*	*		*											
Microscopes				*	*		*											
Fashion an Invertebrate				*	*													
Algae Press and Classification				*	*		*											
Monitoring Follow-up				*	*		*		*			*	*				*	
Taking a Liking to Lichen				*	*		*											
Critter Catch	*		*	*	*	*	*											
Whooo's for Lunch?				*	*		*	*										
Weather and Snow Observation	*						*											
Water Quality Sampling	*						*											
Plankton Tow	*		*	*	*	*	*											
Sand Painting																		
Archeology Activity																		
Environmental Problem-Solving																		
Miss Manners Guide to the Beach																*	*	*
Forest Management Dilemma													*			*	*	
Pollution Solution																*	*	





Alaska Content Standards Addressed:

Content Standard A: A student should understand scientific facts, concepts, principles and theories.

- A-4** Understand observable natural events such as tides, weather, seasons, and moon phases in terms of the structure and motion of the earth (Earth).
- A-7** Understand how the earth changes because of plate tectonics, earthquakes, volcanoes, erosion and deposition, and living things (Processes that Shape the Earth.)
- A-9** Distinguish the patterns of similarity and differences in the living world in order to understand the diversity of life and understand the theories that describe the importance of diversity for species and ecosystems (Diversity)
- A-12** Understand the transfers and transformations of and flow of matter and energy that link living things and their physical environment, from molecules to ecosystem (Flow of Matter and Energy).
- A-14** Understand the interdependence between living things and their environments; and understand that a small change in a portion of an environment may affect the entire environment (Interdependence)
- A-15** Using science to understand and describe the local environment (Local Knowledge)

Content Standard B: A student should possess and understand the skills of scientific inquiry.

- B-1** Using the processes of science; observing, classifying, measuring, interpreting data, inferring and communicating.
- B-2** Design and conduct scientific investigations using appropriate instruments.
- B-3** Understand that scientific inquiry often involves different ways of thinking, curiosity, and the exploration of multiple paths.
- B-4** Understand that personal integrity, skepticism, openness to new ideas, creativity, collaborative effort, and logical reasoning are in all aspects of scientific inquiry.
- B-6** Employ strict adherence to safety procedures in conducting scientific investigations.

Content Standard C: A student should understand the nature and history of science.

- C-2** Understand that scientific knowledge is validated by repeated specific experiments that conclude in similar results.
- C-3** Understand that society, culture, history and environment affect the development of scientific knowledge.
- C-5** Understand that sharing scientific discoveries is important to influencing individuals and society and in advancing scientific knowledge.

Content Standard D: A student should be able to apply scientific knowledge and skills to make reasoned decisions about the use of science and scientific innovations.

- D-1** Apply scientific knowledge and skills to understand issues and everyday events
- D-3** Recommend solutions to everyday problems by applying scientific knowledge and skills.
- D-6** Act upon reasoned decisions and evaluate the effectiveness of the action.