

PROGRAM GOALS & PURPOSE

The goal of the Earth Systems Elementary Science Program is to begin the development of scientifically literate, responsible citizens who have a strong sense of place in the biological, physical, geological, and technical world.

The underlying purpose of the Earth Systems Elementary Science Program is to capture, develop, and nurture the essence of good scientists in all students including...

...a compelling sense of wonder.

...a joyful sense of discovery.

...a comforting sense of belonging.

...an unwavering sense of balance.

...an awesome sense of place.

...an abiding sense of responsibility.

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The **unifying concept** is reinforced at each K-6 grade level. Each of the science units is taught by applying the unifying concept to the content within the unit. The unifying concept also ties the grade level units to one another and provides a focus of study for the year.

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TIP: Every school has an **INQUIRY TUB** and a **MAGNIFYING TUB** to help teach science concepts. These can be especially useful during the Applications and Investigations unit.

SCIENCE SUPPORT CONTACTS

For Elementary, Secondary, or General science questions, please contact the Science Curriculum Department:

742-4856

or

Texas Gail Raymond

Science Coordinator - 742-4854

We can also be reached through ASD email

WHAT WE OFFER:

Science Kits, Training & Support

All teachers K-6 receive 3 science kits over the year + teach an A&I unit. Training sessions open to all teachers are offered on each kit. Support for science kit use is available at all times through ASD Tube, ERGs, and the web.

Content Related Credit Courses

Offered throughout the year.

Curriculum Review & Assessment

Work with teachers, parents & community members to evaluate the ASD curriculum, create and refine supporting documents, and create appropriate and usable assessment tools for the science curriculum.

Teacher Instructional Support

In-services, Workshops, Credit Classes, Classroom (before or after school, grade level teams, coaching, observe to provide feedback or assist with action research or lesson study) and Professional Development.

Information Distribution

News and opportunity announcements are compiled and distributed electronically.

Community Science Event Support

e.g. Outdoor Week, Water Discovery Days, Planet Walk, State Science Fair, Sea Train.

ELEMENTARY SCIENCE

Earth Systems



Anchorage School District
Science Curriculum Department
ASD Education Center, East Side, 1st Floor

5530 E. Northern Lights Blvd.
Anchorage, AK 99504
742-4856
Fax 742-4581



Last Updated 9/1/09

FRAMEWORKS OUTLINE

... shows the unifying concept and kit taught at each grade level in life, earth and physical science. Full framework available online.

Kindergarten - Characteristics

Life - Myself & Others
Earth - Pebbles, Sand & Silt
Physical - Wood & Paper

First Grade - Interrelationships

Life - Alaskan Animals
Earth - The Power of Water
Physical - Balancing & Weighing

Second - Cycles

Life - Plant Growth & Development
Earth - Soils
Physical - Sound

Third - Change

Life - Observing Alaskan Plants
Earth - Weather
Physical - Changes

Fourth - Systems

Life - Bones & Skeletons
Earth - Earth Materials
Physical - Circuits & Pathways

Fifth - Energy Flows

Life - Ecosystems
Earth - Exploring Energy
Physical - Variables

Sixth - Scale & Structure

Life - There Is No Away
Earth - Astronomy
Physical - Structures



Each kit has a companion Easy Reference Guide (ERG) that includes key information such as:

Kit Synopsis,
Materials Collection Alert,
Teaching Time Frame,
Safety Tips,
Teacher Tips,

Conceptual Storyline & Assessment Map, and much more!

The Easy Reference Guides are supported with more detailed and expanded resources online.

*The Science department
has an ALL NEW
Elementary website!*

**Check out our ESCARGot
(Earth Systems Curriculum & Assessment
Resource Guide)**

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[http://www.asdk12.org/depts/
science/index2.html](http://www.asdk12.org/depts/science/index2.html)

*Any intelligent fool can make things
bigger and more complex... It takes a
touch of genius --- and a lot of courage
to move in the opposite direction.*

- Albert Einstein

ELEMENTARY SCIENCE PROGRAM

...provides classroom teachers with the materials needed to teach hands-on inquiry based science as prescribed by the ASD Elementary Science Frameworks adopted by the ASD School Board.

Elementary science units are delivered in the form of grade level kits. These kits are ordered in the spring by completing a kit request form. Science kits are delivered and picked up during one-week time-slots by ASD warehouse personnel. In addition to science materials, the kits also contain related literature and black-line masters to support writing in science.

The periods between kit returns and deliveries are earmarked for teaching an **Applications and Investigations unit**. This is the fourth strand of the elementary science program and can be a unit of the teacher's choice, a topic the students would like to investigate, an extension of one of the grade level kits, etc. This strand provides teachers with flexibility while supporting the unifying concept at that grade level.

Remember to inventory your kit! Please call the science center if materials are missing.

SCIENCE MATERIALS CENTER STAFF

The Science Materials Center is the central location for the storage, refurbishment and shipping of materials used to teach science grades K-6 in the ASD.

Tami Cocklin, Admin. Assistant - 742-8654 -- kit scheduling, processing, materials inventory, ordering, and budget records. Call or email!

Michael Ryan, Pam Rietman & Blythe Sampson - kit refurbishment, record keeping, materials management, and materials points of contact. Look on label on the end of your kit for the kit technician's name and phone number.