

**03/18/14**

**LUNCH & LEARN:  
ALASKA RESOURCE  
EDUCATION:  
TEACHING  
ALASKA'S KIDS  
ABOUT ALASKA'S  
RESOURCES**

<TARGET><BILL></BILL><SUBJECT>03-18-14 LUNCH and LEARN  
ALASKA RESOURCE EDUCATION TEACHING ALASKA'S KIDS ABOUT  
ALASKA'S RESOURCES</SUBJECT><COMM>HRES28</COMM></TARGET>

# Lunch and Learn

**Tuesday at Noon**

**Capitol Room 106**

**An In-depth Look at Alaska's Resources**

**Lunch provided by presenters**

**HOSTED BY  
REP. ERIC FEIGE &  
REP. DAN SADDLER  
CO-CHAIRS  
House Resources**

**Contact:  
Linda Hay, Staff  
465-3715**

**Tuesday, March 18, 2014**

**Program Title: Alaska Resource Education:  
Teaching Alaska's Kids About Alaska's  
Resources**

**Presenters: Ella Ede—Statoil & Vice President of  
Alaska Resource Education Board of Directors**

**Sponsor: Alaska Oil & Gas Association**

**Ella L. Ede**  
Stakeholder Engagement Manager  
Statoil – Alaska  
3800 Centerpoint Drive, Suite 920  
Anchorage, Alaska 99503  
(907) 229-1780 cell or (907) 433-5711 office ♦ E-Mail: [eede@statoil.com](mailto:eede@statoil.com)

---



### Biography

Ella Ede is the Stakeholder Engagement Manager for Statoil Alaska, responsible for community relations and communication with external and internal stakeholders. As a life-long Alaskan, Ella has over 25 years of experience working with the oil and gas and mining industries. Ella was raised in rural Alaska Native villages, including Koyukuk, Kongiganek, Naknek, Nikolai, and Selawik.

Her experience includes environmental management, stakeholder engagement, and public relations on large Alaska projects. She was the environmental project manager for the Pebble Project for three years, and previously worked in consulting following the *Exxon Valdez* Oil Spill managing environmental studies to establish baseline conditions and determine impacts. She is currently on the board of directors' executive committee of the Resource Development Council, and serves as the Vice President of the Alaska Resource Education board of directors.

---



IT BEGAN WITH A GOLD RUSH.  
AND THEN CAME THE PIPELINE.  
It continues today in a classroom near you.

There's only one way to make sure  
students make smart decisions  
about Alaska's natural resources:  
teach them the facts.



“GOOD AFTERNOON.  
PLEASE TAKE YOUR SEATS.  
Today's subject — how to capture  
the imagination of Alaska's teachers  
and students.”

From our Jelly Belly Geology lesson for kids  
to graduate classes for teachers, we're putting  
Alaska's resources to work in the classroom.



IF YOU HAD ONE CHANCE TO TELL EVERY  
STUDENT IN ALASKA ABOUT YOUR INDUSTRY,  
WHAT WOULD YOU SAY?

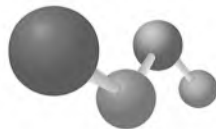
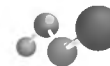
At Alaska Resource Education, we live for questions like this  
— in fact, we've built our entire curriculum around them.  
We believe it's essential to bring resource education into the  
classroom now — so the students of today have the tools  
they need to answer the resource questions of tomorrow.



PARTNER WITH ALASKA  
RESOURCE EDUCATION.

Together we can inspire young minds  
about Alaska and its resources.

The learning process never ends!  
[AKRESOURCE.ORG/DONATE](http://AKRESOURCE.ORG/DONATE)





The tree "cookie" below is part of the Alaska Resource Kit we distribute to teachers across the state. The vials of gold and oil and the fluorite shown on the previous pages are also from our kit.



**"WE SUPPORT  
ALASKA RESOURCE EDUCATION**  
because they educate students and teachers about Alaska's resource industries, why they're important and how we use their products every day."

*Karen Cowart  
Director Community Relations, BP*

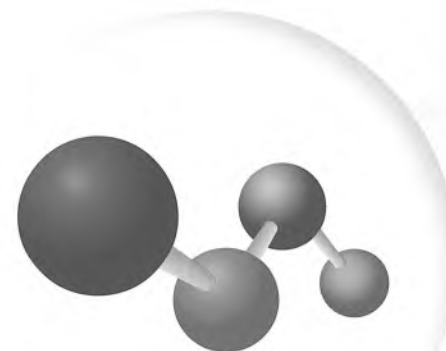


**alaskaresource™  
E D U C A T I O N**

601 East 57th Place #104  
Anchorage, Alaska 99518

[WWW.AKRESOURCE.ORG](http://WWW.AKRESOURCE.ORG)

907.276.5487



**alaskaresource™  
E D U C A T I O N**

**YOU PUT THE POWER OF ALASKA'S RESOURCES  
INTO THE HANDS OF THE WORLD.**

**WE PUT THE POWER OF ALASKA'S RESOURCES  
INTO THE HANDS OF ALASKA STUDENTS.**





**alaskaresource**  
**E D U C A T I O N**

501(c)(3) educational nonprofit

Presented to the House Resources Committee  
Lunch & Learn  
Tuesday, March 18, 2014

*Igniting* young minds

and

*Inspiring* students

since 1982



**alaskaresource**  
E D U C A T I O N

*Bringing natural resources out of the ground and into the classroom*



*Committed to the belief that we need to reach students*

*often and early,*



**ARE's mission is to teach students about Alaska's natural resources.**

Supported jointly by the Department of Education and Early Childhood Development  
and private industry



Resource  
Economy



<http://jkpreschool.com/enrichment/>

Teachers  
educating  
tomorrow's  
workforce

# Dedicated to the sustainable future of Alaska



STEM-focused learning



Hands-on activities with local, tangible applications

## WHERE DOES ENERGY COME FROM?

### Finding Oil in a Cupcake

Essential Question: What are fossil fuels?



Time: About 2 hours

Girl Scouts learn about how geologists help find oil that is deep below the ground through a fun activity to find oil in a cupcake.

### Information and Procedure

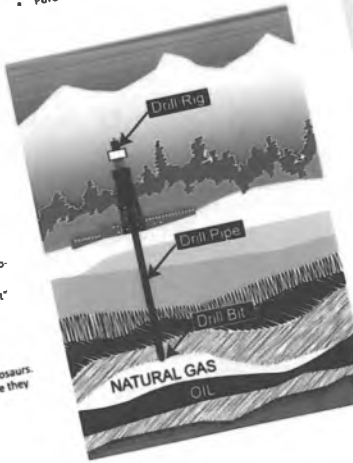
- Materials**
- Handout: What are Fossil Fuels?
  - Cupcakes, 1 per Girl Scout (See Info on "Preparing Cupcakes")
  - Clear plastic straws
  - Handout Finding Oil...in a Cupcake?
  - Colored Pencils
  - Sharp Knife

- What to do in advance**
- Collect resources and select useful web-sites.
  - Print the "Information Scavenger Hunt" worksheet

**Gear up**  
Introduce the idea that we use some resources today that are as old as dinosaurs. Explain what a fossil fuel is and where they come from.

### Vocabulary

- Fossil fuel
- Petroleum
- Non-renewable
- Porous



Page 3  
Copyright © 2014 American Girl Education LLC

## WHERE DO MINERALS COME FROM?

### Jelly Belly Geology & Rock Identification

Essential Question: How do you identify rocks and minerals?



Time: 1-2 hours

Girl Scouts will learn to identify and classify rocks and minerals by their properties.

### Information and Procedure

- Materials needed**
- Small cups or bag to hold Jelly Belly's
  - Jelly Belly's (see the Jelly Belly Key for flavors)
  - Jelly Belly key and Rock Key
  - Alaska Rock and Mineral Collection (40-specimen set can be checked-out at your local Girl Scouts office)

### What to do in advance

Copy the attached handouts for the Girl Scouts. In each small cup, put 1 of each flavor of Jelly Belly

### Gear up

1. Discuss prior knowledge of rocks and minerals to gauge how much introduction or review to include in the lesson. Let them describe a favorite rock they have by using one or two descriptive words.
2. Explain the term geologist. A geologist is a scientist who studies the solid and liquid matter that constitutes the Earth.

### Explore

1. Hand out the Jelly Belly's and Keys for the Girl Scouts. Instruct Girl Scouts to NOT EAT the Jelly Belly's because they are the rocks that they are going to classify and identify.
2. Have the Girl Scouts start with the color of the Jelly Bean and follow the lines that most appropriately describe their Jelly Belly until they reach the flavor. Have them continue until all their Jelly Belly's have been classified.
3. When finished, have the Girl Scouts taste test

### Vocabulary

- Geologist
- Classification
- Characteristics
- Opaque
- Translucent

their Jelly Belly's to see if they matched it with the correct flavor. Have them tally their answers as correct or incorrect and log it in the box on the Jelly Belly Key.

4. Discuss that geologists are not always accurate in their assessments. Rocks can have many similar characteristics but still be different. It is important for geologists to conduct several types of tests and to repeat their work to make sure they are accurate. A mistake in real life could cost millions of dollars to the company.

5. Have Girl Scouts partner up. Show them the Alaska Rock and Mineral Kit and explain that these are materials that are mined currently or historically in Alaska. Pull out the rocks listed on the Rock Key and hand one or two out (depending on class size) to each pair. Be sure to keep the lid of the Rock Key with you as they contain the answers.
6. Instruct the Girl Scouts to classify their rock samples from the rock kit using the Rock Key. Have them write their answer next to their rock on a sheet of paper. Confirm with them if they matched the correct rock with the name.

### Generalize

- What were some of the observable characteristics that helped you to identify one rock/mineral out of many?
- Why might it be important for scientists and geologists to observe and describe things carefully?
- What makes it difficult to identify one rock from another?

## HOW DO FORESTS CHANGE OVER TIME?

### Every Tree for Itself

Essential Questions:  
What do forests need to survive and be healthy?  
What is the relationship between plants and the non-living environment?



Time: 1-2 hours

Girl Scouts play a game to simulate how trees compete for their essential needs.

### Vocabulary

- Competition
- Photosynthesis
- Drought
- Nutrients
- Roots
- Growth
- Motion

### Information and Procedure

- Materials needed**
- 8" x 10" (20 cm x 20 cm) pieces of paper or paper plates
  - Pieces of blue, yellow, and green paper or three colors of poker chips
  - Markers or crayons
  - Tree Cookie from the ARE kit, and additional tree trunk or branch cross-sections showing annual growth rings if available (often available from tree-trimming services or forest industries)

### What to do in advance

Cut two 3" x 3" (7.6 cm x 7.6 cm) squares out of blue, yellow, and green construction paper for each Girl Scout. To save time, you could use colored poker chips. Poker chips work much better than paper if you're doing this activity outdoors on a breezy day.

### Gear up

Ask the Girl Scouts that if they were a tree and lived in the forest, would they rather be a strong older tree, a regular size tree, a small tree just starting out, or a tree that preferred shade. Why?

### Explore

Pass out the Tree Cookie or any cross-sections of trees you have. Have your Girl Scouts examine the growth rings. If you don't have an actual cross-section, draw a big one on the chalkboard. Explain that the number of rings indicates a tree's age.

### Discuss

What do trees need so they can grow? Trees have some of the same needs as those of people and animals. For example, they all need plenty of water and nutrients, get food in the same way. Plants make their own food by using energy from the sun or trees don't get enough water, nutrients, or sunlight, they may grow slowly or die. Growth rings show this graphically. In general, wide rings indicate good conditions for growth (plenty of nutrients, water, and sunshine) while narrow rings often indicate less growth due to drought, short growing seasons, insect damage, lack of nutrients or competition.

Page 4  
Copyright © 2014 American Girl Education LLC

# ENERGY

# MINERALS

# FORESTRY

## K-8 (adaptable 9-12) curriculum

### STEM FOCUSED

### STATE GRADE LEVEL STANDARDS APPLIED

### ALIGNED WITH COMMON CORE

### INTERDISCIPLINARY

# Alaska Resource Kit

**2013**  
**168 Kits distributed**  
**Statewide**

**YTD 2014**  
**36 Kits distributed**  
**Statewide**



# “Rock & Roll Around Alaska” Course

**2013**

**YTD 2014**



**43** teachers  
from  
**23** schools  
across  
**4** regions

**27** teachers  
from  
**24** schools  
across  
**2** regions



# Youth Programs

2013

YTD 2014

**440** students  
across  
**4** regions

**144** students  
across  
**2** regions



Energy Einsteins



Minor Miners



Girl Scouts:  
Women in Science  
and Technology  
Days

# Classroom Visits



**2013**

**89** classes,  
**2,256** students  
across  
**9** regions

**YTD 2014**

**30** classes,  
**667** students  
across  
**7** regions



# ARE and Girl Scouts Partner on Resource Education Patches!



Spring 2014 Launch Parties:



**Energy:** Anchorage (BP)

**Minerals:** Bethel (Donlin Gold)

**Forestry:** Juneau (TBD)

**Natural Resources:** Kenai (Apache, Hilcorp)

# Looking Forward ...

**2** Rock & Roll Courses in  
Fairbanks and Delta Junction



**22** Classroom visits in  
Fairbanks, North Pole, Delta Junction, and Anchorage

**1** Youth Program

**The Minor Miners are coming to AMA in Fairbanks!**



**ARE** is teaching  
**Students** about the  
*Importance* of **Resources**  
in their *everyday lives*



# How you can help

## Alaska Coal Association and Alaska Resource Education presents The 21st Annual Coal Classic

Wednesday, June 12th at the Anchorage Golf Course  
Breakfast, Registration, and Hosted Driving Range 6:00 am, Shotgun Start 7:00

### SPONSORSHIP OPPORTUNITIES

\$400 Breakfast Sponsor	\$200 Driving Range Sponsor
\$500 Beverage Cart Sponsor	\$300 Hole Sponsor
\$600 Lunch Sponsor	Specialty Item Sponsor
\$2,000 19th Hole Bloody Mary Bar Sponsor!	Door Prize Donation
	Goodie Bag Items (160 of each)

### REGISTRATION FEES

\$1,000 Team (Four Golfers)	Great prizes and lunch included!
\$300 Individual Golfer	Play "Par 3 Poker" and "Hire a Pro!"

### REGISTER BY FRIDAY, JUNE 7th

Call 907-276-5487 or  
email [golf@akresource.org](mailto:golf@akresource.org)



Proceeds benefit Alaska Resource Education

**alaskaresource EDUCATION**  
**Pirate Party**  
Friday, October 25, 2013  
7pm-10pm  
The Bridge Restaurant  
It's time to set sail for adventure  
with Alaska Resource Education!

Ye be the captain o' the seas! Pirate booty an' tickets fer sixteen o' ye shipmates!  
**Captain Sponsorship (\$2,000)**  
 First Mate Sponsorship (\$1,500)  
 Booty an' tickets fer ten o' ye shipmates to walk th' plank!  
**Deckhand Sponsorship (\$1,000)**  
 Ye be havin' six tickets an' booty fer yer closest shipmates!  
**Tattoo Parlor Sponsor (\$500)**  
 Ye be the scalliwag responsible fer colorin' yer shipmates!  
**Photobooth Sponsor (\$500)**  
 Dead men tell no tales. Unless thar be pictures t' prove it.  
**Pirate Mugs Sponsor (\$500)**  
 givin' yer shipmates chalices fer drinkin' songs an' drinkin' grog!  
 907-276-5487 or visit [www.akresource.org](http://www.akresource.org)  
 an' join th' band o' pirates!

**alaskaresource EDUCATION**  
announces their  
**Spring Raffle & Auction Fundraiser**  
at  
The Alaska Miners Association Spring Convention  
Centennial Hall, Juneau  
February 14, 2013  
Please consider donating a prize and help support  
Resource Education in Alaska's classrooms!  
Raffle Grand Prize  
made possible by  
**Alaska Airlines**  
Win Two Round-Trip Tickets!  
Valid on select Alaska Airlines flights including Alaska and Hawaii. See Alaska.com.

Alaska Resource Education  
601 E. 57th Place, Suite 104  
Anchorage, AK 99518  
907 - 276 - KITS (5487)  
[kits@akresource.org](mailto:kits@akresource.org)  
Executive Director: Michelle Brunner

# QUESTIONS?

The word cloud features the following text elements:

- Ignite Alaska** (largest text)
- 2,696 students taught
- 43 teachers
- 4 regions of Alaska
- Innovate
- Inspire
- 27 Energy Einsteins
- 89 classroom visits
- Invent
- Minor Miners
- low Stuyahok
- Nome
- Mat Su
- Point Hope
- Bethel
- Fairbanks
- Juneau
- Wainwright
- Barrow
- Point Lay
- Juneau
- natural resources
- Kivalina
- Kotzebue
- Anchorage
- Sandpoint
- Atkasuk