

Be an Eagle Eye

Second Grade

Activity: 5

Time: 1 Class Period

General Description

Students will use their “Eagle Eye” to spot energy and water waste.

Objectives

Students will become aware of energy/ water being wasted and will develop strategies to conserve those natural resources and share those strategies with others.

Arizona State Standards

SC02 S1C2 PO1 Demonstrate safe behavior and appropriate procedures (e.g., use of instruments, materials, organisms) in all science inquiry

SC02 S1C2 PO4 Record data from guided investigations in an organized and appropriate format (e.g., lab book, log, notebook, chart paper)

SC02 S1C2 PO3 Use simple tools such as rulers, thermometers, magnifiers, and balances to collect data (U.S. customary units)

SC02 S1C4 PO1 Communicate the results and conclusions of an investigation (e.g., verbal, drawn, or written)

W02 S3C2 PO1 Write expository texts (e.g., labels, lists, observations, journals)

R02 S3C2 PO1 Follow a set of written multi-step directions

M02 S2C2 PO1 Formulate questions to collect data in contextual situations

M02 S2C2 PO2 Make a simple pictograph or tally chart with appropriate labels from organized data

Teacher Background

Discuss with students the excellent vision of an eagle. Brainstorm with students what energy is and examples of wasted energy. Discuss with students that fact that water is a limited resource and where they might see waste. Ask students why they think it might be important to save energy/water and how it is beneficial to them. For example if their parents save money on their energy bills there is more money for other things or if we don't conserve water we might not have enough to drink.

Materials

Picture of an eagle

Papers cut in the shape of large eagle feathers

Optional Activity Cards 2-5a, 2-5b, 2-5c, 2-5d, 2-5e, 2-5f

Procedure/Exploration

1. The class will discuss eagle vision.
2. Brainstorm energy/water sources and examples of waste.
3. Discuss why saving energy/water is important and how it can impact their lives.
4. Take a walk around campus and have the students use their “eagle eyes”.
5. Model for students what it means to use their eagle eyes to find wasted energy/water.
6. As the students travel the campus they will record on the eagle feathers the energy/water they saw being wasted.
7. When they return to class have the students write on the other side of the feather how they could save the energy/water they saw wasted.

Optional

You might want to invite an expert into the classroom to talk to the students. Invite your school maintenance team talk to the students.

Lights out

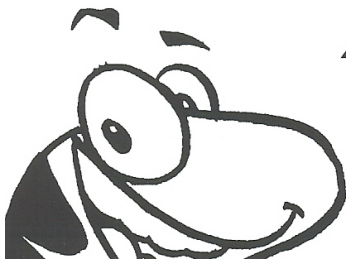
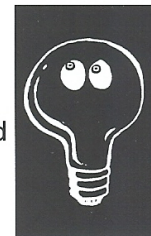
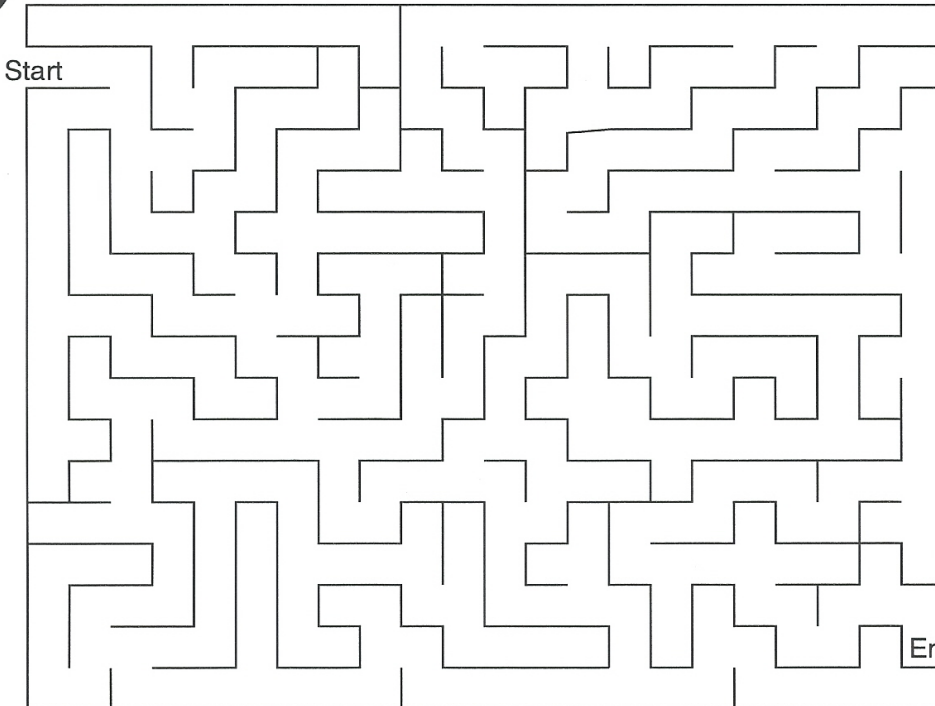
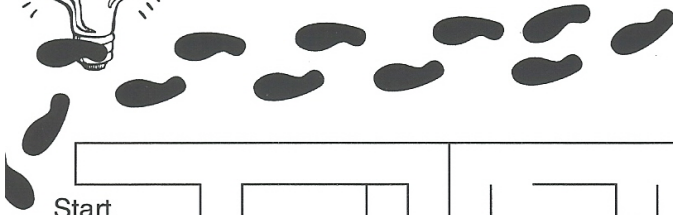
Second Grade

Activity: 5

Activity Card: 2-5a

Student's Name:

Date:



***"Be an energy saver!
Find the way to
turn off the light."***

APS Power Posse™

Resource Saver

Second Grade

Activity: 5

Activity card: 2-5b

1. Energy Saver game materials: one game board (see other side), four markers, one number cube.
2. This game could be used as a center activity or a free-time activity.
3. The children should roll the cube to see who goes first, and then roll the cube and move the proper number of spaces on the board.
4. Mounting the game on heavy paper and laminating it will help keep it for future use.

Resource Saver

Second Grade

Activity: 5

Activity Card: 2-5c

Student's Name: _____

Date: _____

Start				Finish	
You read a book. No TV Good for you!!! Go ahead 1 space	You took a shower instead of a bath. Go ahead 2 spaces		You left a light on in your room. Back 3 spaces		
		You helped Mom put up shade screens. Go across the bridge.	You left hot water dripping in sink. Go back 1 space.		
You left the TV on when you went out to play. Go back to Start!			Your family saved gas by making only one trip to the store this week. Go ahead 2 spaces.		
	You helped Mom hang clothes outside instead of using the dryer. Go ahead 3 spaces				

Energy Collage

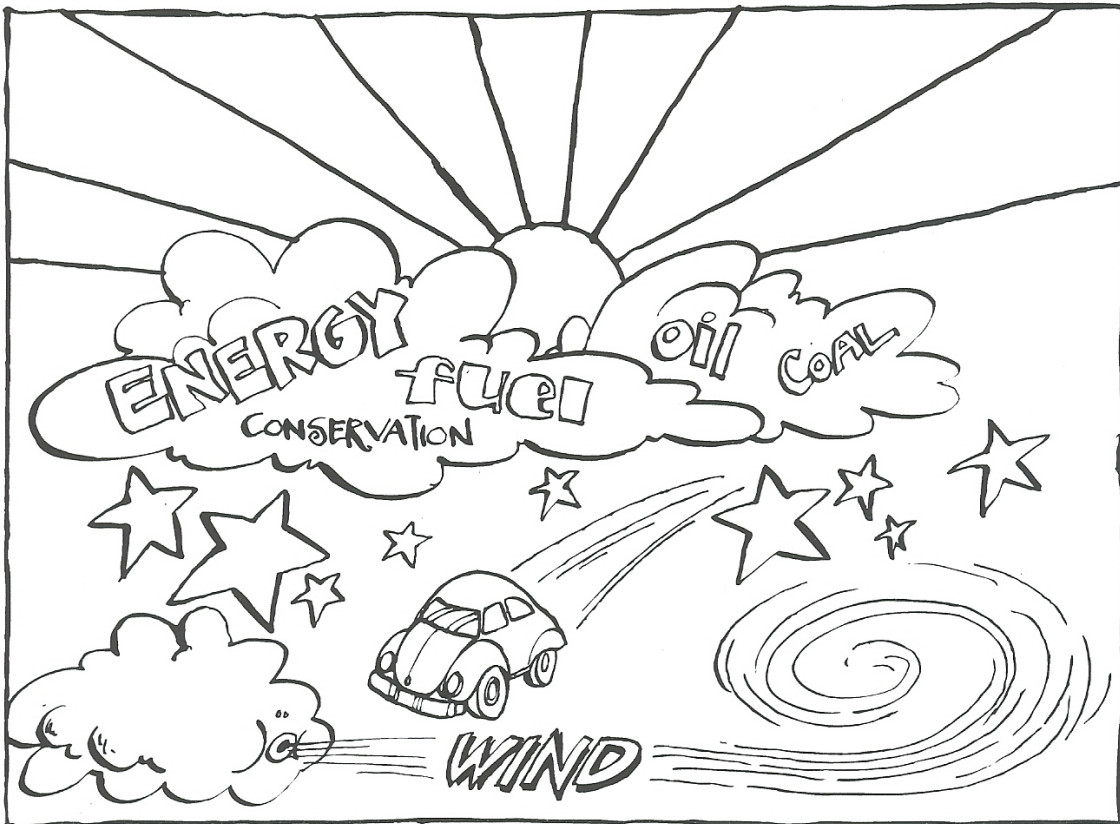
Second Grade

Activity: 5

Activity card: 2-5d

Student's Name:

Date:



1. Materials: scissors, glue, old magazines and heavy paper.
2. Have the students go through magazines and cut out pictures of objects using different types of energy sources (food, wind, sun, water, oil, coal, electrical, gas).

Energy Seek and Find

Second Grade

Activity: 5

Activity Card 2-5e

Word Hunt

Find the words listed on the right. They can be found horizontally, vertically, or diagonally. Circle the words when you find them.

C M E N D A D D G R S A N D O P M Z X R V
A X X O L T I L L C C T I O A T F S R A T
T O P T A M N A M F O S S I L F U E L T U
H I L T T V O E X I T N O L A J E C D E M
E T O R I M S F S P O T S R S T L F G H N
F O R A L A A K L L O N I E J S I O E S B
S H A L E M U O K M L O S A R L M E N T E
O D T I N O R P T S R T R A L V E N T A R
M B I L E N V I R O N M E N T H E X V N V
A Y O U R F C X R L B E E T N A M A L Q E
C G N T G O T J A A L T E R N A T I V E T
E R A Y Y X R K O R M L A L N O G U A M I
R C E S T R U G E O T H E R M A L X T O V
G M O C P S I T G O T H Y D R A E I C F O
Y N U C Y I O S H A L S E O H Y D R O I F
N D I C E C N U C L E A R H A L E O A W U
U E K L B A L L R O C U Q U I T E W L E I
R C E S T R U E F C T H E R H A L X I O V
G H O C P S I T G D E B T U R A E I C F O

energy
environment
exploration
fossil fuel
conserve
recycle
oil
dinosaur
shale
coal
alternative
solar
nuclear
hydro
geothermal
source

Energy Seek and Find

Answer Sheet

Second Grade
Activity: 5
Activity card: 2-5f

C M E N D A D D G R S A N D O P M Z X R V
A X X O L T I L L C C T I O A T F S R A T
T O P T A M N A M F O S S I L F U E L T U
H I L T T V O E X I T N O L A J E C D E M
E T O R I M S F S P O T S R S T L F G H N
F O R A L A A K L L O N I E J S I O E S B
S H A L E M U O K M L O S A R L M E N T E
O D T I N O R P T S R T R A L V E N T A R
M B I L E N V I R O N M E N T H E X V N V
A Y O U R F C X R L B E E T N A M A L Q E
C G N T G O T J A A L T E R N A T I V E T
E R A Y Y X R K O R M L A L N O G U A M I
R C E S T R U G E O T H E R M A L X T O V
G M O C P S I T G O T H Y D R A E I C F O
Y N U C Y I O S H A L S E O H Y D R O I F
N D I C E C N U C L E A R H A L E O A W U
U E K L B A L L R O C U Q U I T E W L E I
R C E S T R U E F C T H E R H A L X I O V
G H O C P S I T G D E B T U R A E I C F O