

TEACHER MATERIALS - Fireflies

CONCEPTS:

Math, Science, and Technology
 -Standard 4.1, 4.6- Living Environment
 ELA
 -Standard 1.1- Listening and Reading
 Career Development
 -Standard 3a.1- Basic Skills

OBJECTIVE:

The students will explore a curiosity which they may have already noticed; The Firefly.

ACTIVITY:

1. Ask the students if they have ever seen a firefly blinking at night. What other name does it have?
2. Read the book, *Fireflies in the Night*, by Judy Hawes. One pilot teacher suggested reading it in the dark with a flashlight.
3. Discuss the information. Has any student ever caught fireflies?

Questions for discussion:

Q. Why did the jar need holes?

A. The fireflies need air.

Q. Fireflies communicate by blinking, how do we communicate?

A. Words, expressions, gestures, body language, pictures.

Q. Why not keep the fireflies, why let them go?

A. They would die in the jar.

Q. Does the firefly have a light bulb on its back?

A. no

Q. How do you catch fireflies?

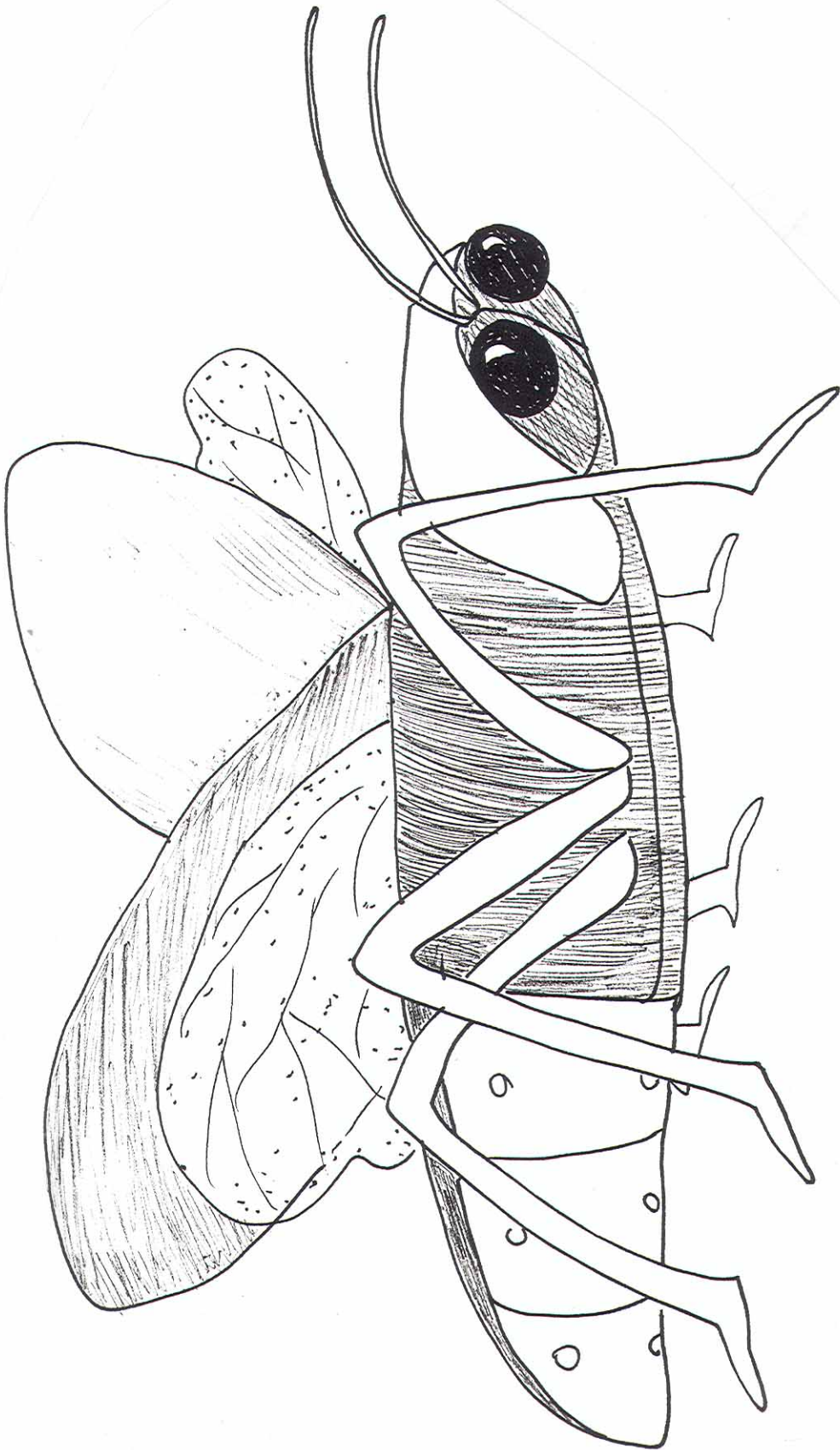
A. Read the poem and have the class do the "Firefly Scoop"!

4. Have the students examine different light sources, candles, incandescent lights, florescent lights, a kerosene lantern, etc. Compare hot light and cold light. Predict which light sources last longest—the firefly, candle, match, light bulb, the sun.
5. Bring a speaker into class from the local power company and discuss energy use/conservation—NYSEG, Ni-Mo, Con Ed, etc. Ask why the energy companies use a cartoon character which is a firefly (lightening bug). This is a good opportunity to discuss safety with electricity.
6. *Contributed by Vickie Myott:* Have the students draw or color and cut out a **Firefly** (an example is on page K- 78). Put gold glitter on its abdomen.
7. Read and have the children perform, "**The Firefly Scoop.**"
8. Use the "**Energy Drinks**" for snack time.

Suggested books: Hawes, Judy. Fireflies in the Night. New York: Harper Collins Children's Books, 1991. This book can be purchased through our office, New York Agriculture in the Classroom.

Additional reading: Brinckloe, Julie. Fireflies. New York: Macmillan Publishing Co., 1985.

The Firefly



The Firefly Scoop

It's dark at night.
I see a light!
Blink, blink, (pause) blink, blink
Blink, blink, (pause) blink, blink.
It's a firefly, I think
I think.
A firefly, I think
I think.
I want to catch this firefly.
I'll scoop it up
right out of the sky.
Scoop, scoop, (pause)
scoop, scoop
Swoop, swoop, (pause)
swoop, swoop.
It isn't easy, I've got to try
Scoop, scoop, (pause)
scoop, scoop
Swoop, swoop, (pause)
swoop, swoop.



I got one,
I got one!
It's blinking bright
and lots of fun.
Let's give it air
and let it breath.
Not too long,
I'll let it leave.

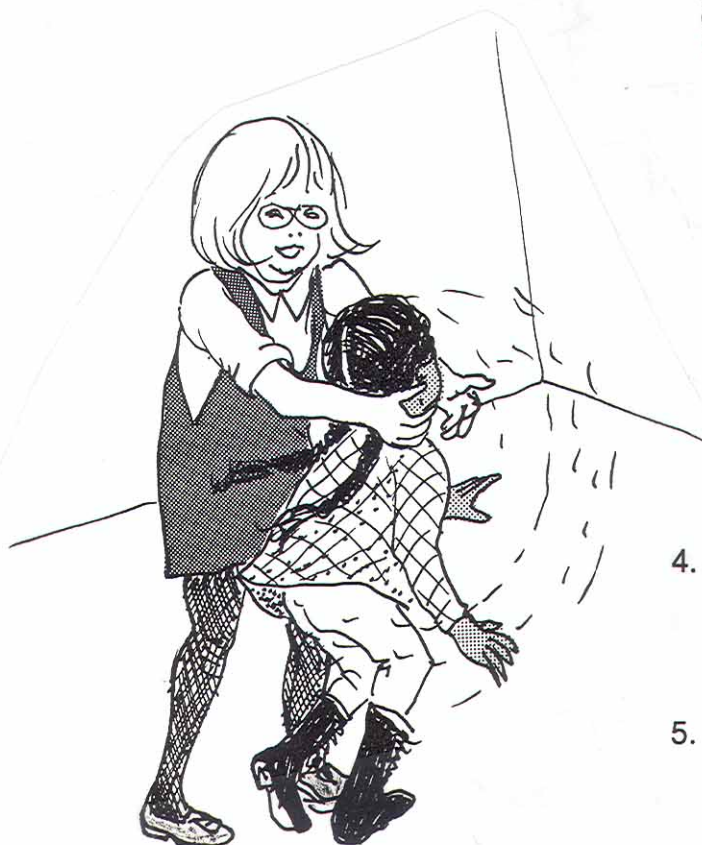
The Firefly Scoop

1. Have half the class pretend they are fireflies swooping through the air.

2. Have the other half pretend they are trying to scoop up the fireflies. They will do this by surrounding them with their arms.

3. Let the fireflies swoop, then pause and blink.
"Blink, blink, blink, blink"

Now have all the scoopers scoop up a firefly!



4. Once all the scoopers capture their fireflies have them release them.

5. Reverse the roles.



These two drinks are high in energy and spicy, too! They could also be used at Christmas or Valentines Day!

Orange Mints

Ingredients per student:

- orange
- peppermint stick

Have each student roll their orange on the table pressing it as they roll. This releases the juice inside the orange. Cut off a small slice from the top of the orange. Insert the peppermint stick. Have the children suck on the peppermint stick until they can drink the juice. Drink away!

Apple Heart Juice

Ingredients for 2 students:

- 2 cups apple juice
- 1 Tablespoon cinnamon, red hot hearts
- 1 teaspoon lemon juice

Combine apple juice, red hot hearts, lemon juice in a saucepan. Place over a low heat, stirring until red hots melt. Cool a while, then serve in cups. This can also be served cold over ice.