

Mrs. Miller's Science



"A Year of Lessons"

August 2013

Introduction

I first began working as a kindergarten instructional assistant in September 1988 in Roseburg, Oregon, after a year of volunteering daily in my oldest daughter's first grade classroom. Due to my husband's transfer we moved north to Salem in October 1991. By March of the following year, I had a new position in a Salem kindergarten classroom--which is where I still work today.

During my third year in Salem, as part of my yearly evaluation, my teacher asked me to set a "career goal". I was clueless, so she suggested because of my interest in science perhaps I could create a goal to come up with weekly science lessons for the kindergartners. Since then, the lessons have changed and evolved. Mostly to include resources such as literature and dvds, journal writing, and themes--as well as continually streamlining the lessons to cut down on prep. I've been fortunate to gain the assistance and sometimes collaboration from other kindergarten aides and helpful suggestions from teachers I have worked with.

Many of the lessons have to do with the properties of air, water and flight. We have tucked some seasonal topics into the curriculum also. Typically, I have a separate space in the school to take half the class at a time for a weekly lesson. Thirty minutes is the average length of time, which includes journal writing.

I have a cart where I keep "every week" items all the time and temporarily add the items to be used during a particular lesson. Every week items include: a science journal for each child, erasers, pencils, extra paper, reward stickers, a permanent marker and a dry erase marker.

The following lessons are in the order I've adhered to for several years (with slight changes to accommodate holidays like Groundhog's Day and Valentine's Day).

Remember, make it fun and keep asking questions.

Junior Scientist: A Year of Lessons

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First day of science:

First explain to students that we'll be doing science once a week.

"Sometimes we'll read a science book or do an activity or make things. Once in awhile we'll watch a science DVD. Almost always we'll write in our journal, unless we run out of time. When we have extra time, we'll play "The Pizza Game". It's a letter guessing game like hangman."

Then review (hopefully teacher has already had this discussion in classroom) what "ready to learn" looks like: eyes on teacher, hands to self, not talking to classmates, etc.

- Read: What is a Scientist? by Barbara Lehn
- Introduce journals prior to handing out. Explain format: use one page at a time, begin on first page, writing small, date on top, topic title, and finally, how we draw a diagram at the bottom of the page.
- Have children write names on journal covers.
- "Turn to first clean page."
- "Today's date is ..."
- "We're writing "science". Remember, no worries, just do your best."
- For the diagram: "Scientists use their eyes (draw an eye). They use their nose (draw a nose)..." etc.
- Hand out stickers for journal cover. Collect journals and pencils.

End.

Date

Science



Germs Unit Begins (3 lessons):

#1) Watch Reading Rainbow, "Germs Make Me Sick"

#2) **Handwashing**

Supplies: Blacklight, extension cord, Glo Germ Lotion, foaming soap

- Ask children what we did last week (reading rainbow), "today we're going to find out how hard it is to wash all the germs off our hands." Demonstrate how the blacklight works. Briefly go around from student to student with the light. Show how their whites, bright colors and sometimes teeth glow.
- Explain that we're going to rub some special lotion on our hands that glows under the blacklight, "rub it only on your hands, not your face or arms".
- Give everyone a squirt and go around with the blacklight again.
- In an orderly fashion, take children to the sink area. Give yourself a squirt of foam soap and demonstrate how to wash both sides of hands, between fingers, rub nails on palms of hands and to sing A, B, C Song to ensure we wash long enough. Also, make it clear we only go to sink to rinse, not wash again.
- Give everyone a squirt and tell them to wait until you say to begin. Those who finish line up on wall.
- Return to science area and check hands with black light.
- "Where are the germs hiding?"
- "How can we clean our fingernails better?"
- "Have you ever used a fingernail brush?"
- Journals: Date, write "germs", trace hands and dot with "germs".

Date

Germs 1910



Supplies: scissors, copies of "chicken arm" on heavy paper, crayons and brads/paper fasteners..

- Watch "Journey of a Germ" video song from <u>Sid the Science Kid, The Big</u> <u>Sneeze</u>.
- Play act what we watched in "Journey of a Germ": sneezing/coughing on hand, using a pencil, opening a door, shaking hands with friends.
- Explain art project to take home and share with family.
- Color work sheet, cut out arm and use brad/paper fastener to attach arm..

End





Bird Feeder:

Read <u>Wild Birds</u> by Joanne Ryder and <u>Have You Seen Birds</u>? by Barbara Reid Discuss that birds who stay have a difficult time finding seed to eat in the winter.

Supplies: shortening, halved mini-bagels, bird seed, craft sticks, paper bags or baggies, sharpies, broom/dust mop

Set-up: several small plates of shortening at one end of table, 2 aluminum trays of bird seed at the other end

- Hand out gallon zip lock bags to students, have them write their names on bags.
- Demonstrate spreading of shortening and smushing bagel into seed
- Call half the group over, give bagel half, begin, etc

If time, after washing hands, write in journals.

End

Date

Feed the birds

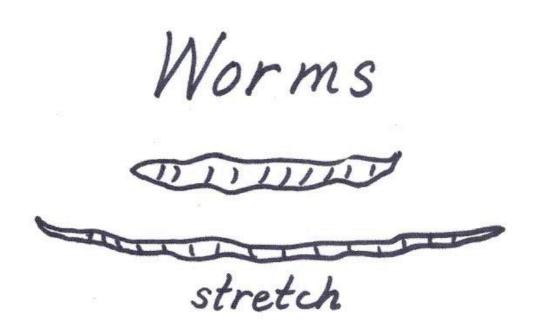
Read and discuss, Wonderful Worms by Linda Glaser

Supplies: Tub of worms, newspaper or butcher paper, gummy worms

- Tell children "I'd like you to meet some of my friends."
- Explain how important it is to be kind, quiet, and careful with my friends.
- Put tub in middle of floor and begin by telling children that my friends came from Mr. Miller's compost pile and they help us turn our grass, leaves, and apple cores into good dirt.
- Ask "who would like to hold a worm?"
- "please be gentle, do not drop"
- "can you see how they stretch and squeeze when they move?"
- Time to wash hands.
- Return to science area and hand out journals
- While writing in journals say, "We held worms, now it's time to eat one!"
- Hand out gummy worms

End

Date



Leaves:

Read, Autumn Leaves by Ken Robbins

Discuss while reading

Supplies: peeled crayons, plenty of copy paper, clip boards if necessary

- Take children out front or out back under maple or oak trees.
- Tell them to select 2 leaves and get back in line
- Return to science area
- Demonstrate leaf rubbing--carefully demo/explain difference in using side vs point of crayon
- Let them begin "write names on the back of each paper"



#1) <u>Air Trap</u>. Read half of, <u>Air is All Around You</u> Franklyn M. Branley and John O'Brien, from "Let's Read and Find Out Science" series

Supplies: clear tubs ¾ full of water, wide clear plastic cups, frosting, marshmallows, craft stick

- "Today we're going to trap some air in a cup"
- Take marshmallow, add frosting and stick inside cup
- Hold up plastic cup and say, "I have 3 things inside my cup. Raise a quiet hand if you can tell me one."
- Demonstrate: "I have to carefully push the cup all the way into the tub. Don't tip!

 And now I carefully pull it out straight up. My marshmallow is dry! (eat) Why?"
- Discuss
- Prepare cups to hand out one by one. "Wait until I say go."
- Write "Air Trap" in journals

End.

Date



#2) Water Trap. Read second half of, Air is All Around You Franklyn M. Branley and

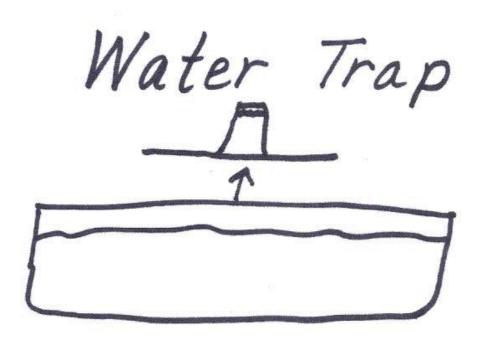
John O'Brien, from "Let's Read and Find Out Science" series

Supplies: clear tubs ³/₄ full of water, tiny plastic cups, playing cards (1 Per child), white tub with towel to hold tiny cups

- "Last week we trapped air in a cup and it kept what dry? This week we'll see how the air in the room or atmospheric pressure can keep water in a cup."
- Warn children not to squeeze cups. "They break easily!"
- Demonstrate: fill cup with one hand, keep in water tub, use 2 fingers from other hand to gently keep card on bottom of cup. Lift hands and cup out of water.
 Release fingers from card. Voila!
- "What's holding up the card and water? As long as air cannot get in, the water can not come out."
- Write "Water Trap" in journals

End

Date



#3) How Straws Work:

Supplies: Drinking straws, plastic cups, pitcher of water, stick pin

- "During our first week of "air" we trapped air in a cup and kept what dry? The
 second week we saw how the air in the room or atmospheric pressure helps to
 trap water in a cup. This week we're going to explore how straws work."
- Pour everyone a cup of water and ask, "how do I use a straw to drink?" Wait until
 someone says the key word, "suck", as you fumble goofily around trying to get a
 drink.
- Hand out straws and ask, "So, I need to suck out the air before I can get a drink?"
- "What do you think will happen if I make a hole in your straw?"
- "Can you hear the air coming in the hole? Is it harder to get a drink?"
- Write "How Straws Work" in journals

End

Date

How straws work

How Straws

#4) Pop A Coin/Quarter:

Supplies: cups of water, quarters, pop bottles in tubs of ice cubes

- "We've been talking about air the past 3 weeks. Today we're going to show what happens when you warm up cold air, but you have to be excellent listeners and keep your eyes peeled. Do you think you can do it?"
- Demonstrate: Pull a bottle out of the ice. Dip a finger in the water and wet the rim of the bottle. Carefully place the quarter on top, all the while voicing your actions to students.
- "Now I'm going to use my hands to warm the air inside the bottle. What do you think will happen? Get ready to turn on your eyes and ears!"
- "Why do you think the quarter "popped" up?
- Hand out quarters to all first.
- Make sure everyone has a cup of water.
- Then hand out the bottles and tell them to begin.
- Write "Pop a Quarter" in science journals.

End



<u>Drip Drop</u>

Supplies: Pipettes/drip droppers, cups of water, pennies, cloth or paper towels

- "Today we're going to learn about surface tension and how water is sticky because water molecules are attracted to each other."
- "How many of you know how to use a drip dropper?"
- Demonstrate how bulb pushes/squeezes air out and sucks water into pipette
 AND how to control drops
- "How many drops do you think will fit on top of my penny?"
- Stop when water begins to look like a bubble. Tell children to bend over, put their eyes level with table's surface so they can see curve of water on top of penny.
- Continue adding drops
- "Now it's your turn. Don't forget to count, and don't touch the water on the penny with your drip dropper."
- Write "Drip Drop" in science journals

End

Date

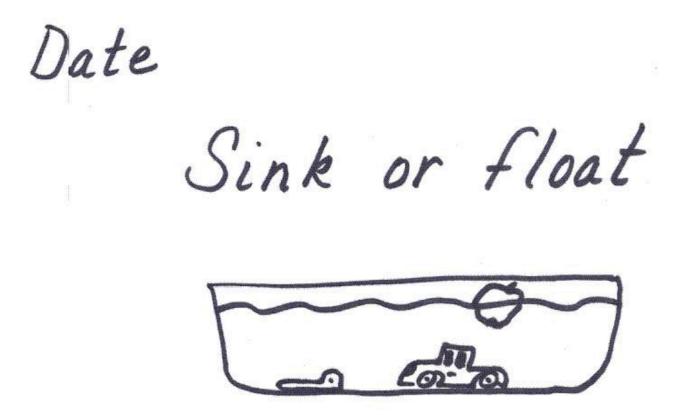
Drip Drop

Sink or Float?

Supplies: Tub of water, towel with line down middle. Collection of small items that sink or float (toys and common household items). Include an orange and one can each of diet and regular soda.

- "Today we're going to investigate how some things sink or float in water."
- "Everyone will get a turn. When it's your turn, you'll come up to pick an item from the tub, hold it above your head and ask "raise your hand if you think this will float. Raise your hand if you think it will sink". Then you'll place it carefully into the tub so we can find out. Place it on this side of the towel if it sinks and the other side if it floats."
- "What surprised you?"
- "What did you observe?"
- Write "Sink or Float" in science journals.

End



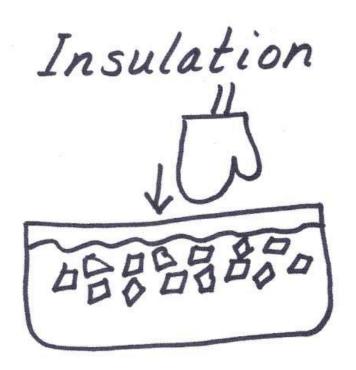
Insulation

Supplies: Snow gloves/mittens, gallon sized plastic bag, cooler of water with ice

- Read: Animals Should Definitely Not Wear Clothing Judi Barrett
- "How do animals keep warm in the winter?"
- "How do people keep warm in the winter?"
- "Today we're going to find out how winter clothing insulates us from the cold."
- "Everyone will get a turn."
- Call first student up to front. "One hand wears the glove, the other hand doesn't."
- Have student place both hands into icy water. "Let's count to 10."
- "Did your gloved hand feel cold? How does your other hand feel?"
- When everyone has had a turn ask, "Do winter clothes insulate us from the cold?"
- Write "insulation" in science journals.

End

Date



Shadows (2 lessons)

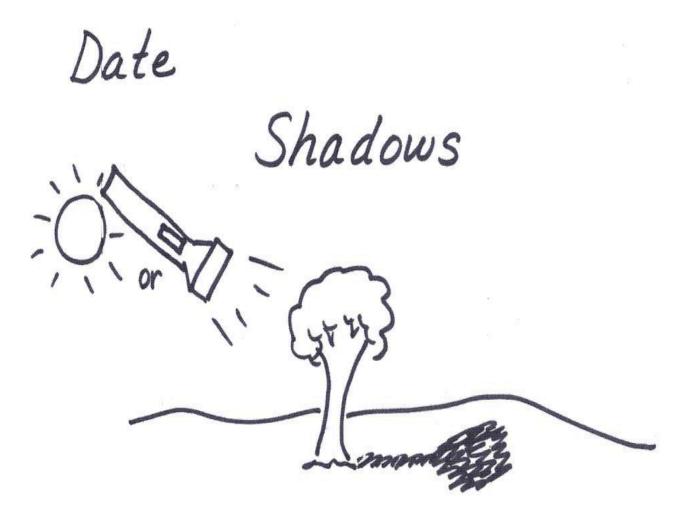
#1) Reading Rainbow DVD, "Me and My Shadow"

#2) "What Makes a Shadow"

Supplies: flashlight, plastic toy tree and animal

- Read, What Makes a Shadow by Clyde Robert Bulla
- Ask if children remember cartoon in Reading Rainbow with sun moving across the sky
- "Everyone will get a turn"
- "Hold the flashlight like this and pretend you're the sun. Remember, the sun moves "around" the earth. Can you make the shadows get longer and shorter?"
- Write "Shadows" in science journal.

End



Hear Your Heart

Supplies: Downloaded heart sound from internet onto smart phone or mp3 player.

Speaker small enough to hold in children's hands.

http://www.soundjay.com/heartbeat-sound-effect.html

- Read: <u>Hear Your Heart</u> by Paul Showers
- "Everyone stand. Jump 30 times with me. Place your hand over your heart. Can you feel it?"
- "I have something special to share with you."
- Let everyone have a turn to hold speaker in hand while you play heart sound.
- Write "Hear your heart" in science journals.

End

Date

My heart

(have students trace

their fist to show

heart size)

Cow Magnets

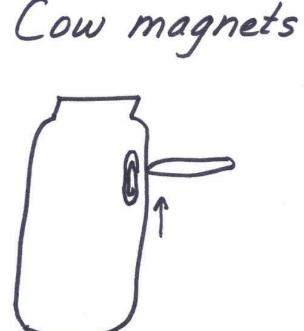
Supplies: Cow magnets, jars, jumbo paper clips

http://www.enasco.com/product/C27472N

- Drop paper clip into jar. "I'm going to get the paperclip out of this jar without touching the jar or putting my hand inside. How do you think I'll do it?"
- "Would you like to try?"
- "Cow magnets are very strong, but they also break easily. Please be careful."
- Read: <u>Mickey's Magnet</u> by Franklyn Branley
- "Today I want to share my cow magnets with you. They're very strong. Farmers
 'feed' them to their cows. When the cows accidentally eat wire or nails, the
 magnets keep it in their stomach so the cows won't get sick and die from getting
 holes inside their intestines."
- Demonstrate how magnets repel and attract.
- Write "cow magnets" in science journals.

End

Date



<u>Five Senses</u> (2 lessons) (possible 3rd lesson--Sid the Science Kid dvd)

#1) Popcorn

Supplies: Hot air popcorn popper, unpopped popcorn, big bowl, cups, extension cord, table

- "Today we're going to use all 5 of our senses."
- "Raise your hand if you can tell me one?"
- Measure and pour in popcorn kernels, "which sense did we use?"
- Turn on popper and wait for smell, "Which sense did we use?"
- When first kernel pops, "did you hear that?"
- Scoop out a cup for everyone, "what senses are we using now?"
- Read: My Five Senses by Aliki
- Write "Five Senses" in science journals

End



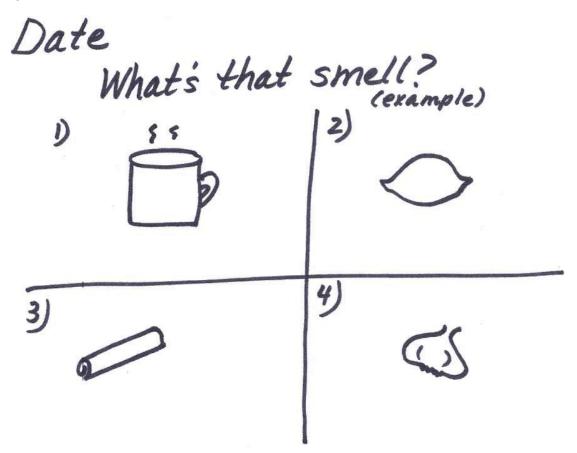
#2) Mystery Cups/What's that smell?

Supplies: Four plastic cups (not clear), place something different in each cup

(cinnamon sticks, coffee, garlic, rosemary, lemon/orange) cover with paper, poke holes and secure with tape or rubber bands

- "Today we're going to use our sense of smell to find out what's in each mystery cup"
- Hand out science journals, "write 'what's that smell?' in your journals."
- "Draw 2 lines on your page--one horizontal like this and one vertical that intersects the middle of the first line like this"
- "We're going to pass one cup around at a time. Draw a picture of what you think is in the cup. Do not say it out loud. I want to see what each of you think."
- Pass around one cup and then another until all four have been around the group.
- "Raise your hand and tell me what your guess was for cup #1, etc." Open each cup and show students what's inside.
- "Which smell was the easiest/hardest to guess?"

End



Dancing Raisins

Supplies: pitcher of water, clear cups, vinegar, raisins, water, craft sticks.

Prep: 1 Tbsp of baking soda for each child in tiny plastic cups, 1 Tbsp of vinegar for each child in tiny plastic cups, pour a cup of water into each clear plastic cup

- "Today we're going to see what happens when we mix baking soda and vinegar together"
- "Add the baking soda to the water and stir"
- Hand out 5 raisins per student
- "drop in the raisins."
- "Pour in the vinegar"
- "What's happening?"
- "What do you see on the raisins?
- "Why do the raisins drop back down?"
- "We created carbon dioxide (CO2) by mixing baking soda and vinegar together.
 The CO2 gas is what causes the raisins to dance. The bubbles stick to the raisins, causing them to rise to the surface."
- "Go to sink and slowly pour liquid down drain. Put raisins in garbage. Put cups in tub for recycling."
- Write "Dancing Raisins" in science journals.

End







Flight Unit (6 lessons)

#1) Reading Rainbow, "Bored Nothing To Do" dvd

#2) Helicopters

Supplies: pre-printed helicopter papers, scissors, jumbo paper clips, tape for repairs, recycling tub

- "What did we watch last week?"
- "Today we're going to make and use a paper helicopter."
- "Listen carefully. We're going to do this together at the same time."
- Hold up your paper. "Can you see the two types of lines? Which line is for cutting? What do you think we do with the other line?"
- "Okay, ready? We're going to cut all around the outside together."
- "Now we have a rectangle"
- "Do I cut on this line?" etc
- "Now it's time to fold" Use a clip board to show how folding is bending and creasing paper on line.
- "Paper clips have a mouth. If you gently pull down on longer bottom lip, you open the mouth. Put your paper clip on the bottom like this"
- "Recycle your scraps and line up at the door"
- While children stand in line, show them how the rotors catch the air and spin.
- "Now let's go outside and catch some air. Remember to stay under the covered area."
- Return to science area.
- Write "helicopters" in science journal.

End

Date Helicopter

#3) Parachutes

Prep: create a parachute kit for each child. Fill a gallon size baggie with a 12" square of

light plastic (we use school garbage bags), 4- 12" lengths of string, one jumbo paper clip.

Supplies: Parachute kits, sharpies, several masking tape dispensers

- Review previous flight lessons.
- "Today we're going to make a parachute"
- You either do this lesson all together or demo--which allows you to supervise and assist students.
- "Inside this bag I have 6 things. One square of plastic, 4 pieces of string, and a
 jumbo paper clip. I'm going to take them out of the bag only when I need them so
 nothing gets lost."
- "First, I write my name on my baggie. Then, I remove my square of plastic and lay it out flat."
- "Next, I remove one length of string. Place the string on one corner--overlapping the plastic about ½ inch."
- "We're going to need six pieces of tape: 1 for each corner equals 4, piece #5 for the string ends, and piece #6 for the paper clip."
- "Now I need a piece of masking tape about this long. Be careful not to tape your plastic to the table!"
- "We'll keep going until we have taped one piece of string to each of the 4 corners."
- "Now I'm going to pick up one end of string, two, three, and four.
- "Get a piece of tape about this long and tape all four ends together."
- "For our last step, I tape the paper clip to the taped ends."
- "I'm going to put pieces of tape on my hands, if you need it."
- "Help a friend or line up at the door when you're done"
- Let's go outside to catch some air. If the wind blows, the kids get an extra treat. :)
- Return to science area.
- Write "Parachutes" in science journal

Date

Parachute



#4) Loop Planes

Prep: Using laminated astro bright paper, cut a paper (the short way) into 1" strips. Cut another paper into 1" strips (the long way), then cut those strips in half. Continue until you have enough sets of long and short papers for your group.

Supplies: laminated paper strips, straight straws (no bendies), sharpies, and clear tape.

- Review previous flight lessons. Don't announce name of what you're making.
- "Today I'm going to make something using a straw and two strips of paper"
- "First I lay my paper strips on the table, parallel to each other."
- "Next I lay the straw perpendicular on top of the strips."
- "We're going to use 4 pieces of clear tape today. Watch carefully."
- "Take a piece of tape about this long and tape the straw to the strip of paper.
 Repeat"
- "Now I need to make a loop with the paper strip."
- Get silly to make your point: "Is this a loop? How about this, is it a loop?"
- "Use a piece of tape about this long to make your loops."
- "Do you think this will fly?"
- Test fly to show students
- "I'm going to put pieces of tape on my hands if you need it."
- "Help a friend or line up at the door when you're done"
- Let's go outside to fly our loop planes.
- Return to science area.
- Write "Loop Planes" in science journal



#5) Watch either Bill Nye the Science Guy's Flight or Sid the Science Kid flight dvd

#6) Last Flight! A celebration

Prep: Assemble foam gliders. One for each child. Add clear tape to tail, wings, and nose weight

- Read How People Learned to Fly by Fran Hodgkins
- Review flight lessons and flight vocabulary/science words, discuss.
- In science journals have students draw their favorite flight and write: drag, thrust,
 lift, differences in air pressure
- "I have something special for you. Remember--they will break, so be careful not to throw into the ground or to step on anyone's."
- Write children's initials as you hand out gliders
- Line up to go outside and fly.

End

Date
Flight air pressure
Lift drag
thrust

Plants (3 lessons)

#1) Seeds in a cup

Prep: cut quadrilaterals from black construction paper to fit inside a clear plastic cup **Supplies**: black quadrilaterals, clear plastic cups, green bean seeds (enough for student to have 3-4 each), rolls of paper towels saturated in bucket (damp not sopping wet)

- Read <u>How a Seed Grows</u> by Helene Jordan
- "Today we're going to plant seeds in a cup, but we won't use dirt."
- Demonstrate or do all together:
- "I have a quadrilateral cut from black paper. If I turn it this way, it looks like a smile. If I turn it the other way, it looks like a(let children answer)"
- "Turn your paper like a frown. Your paper will overlap a little."
- "Now I'm going to add 2-3 wet paper towels to hold the black paper against the sides."
- "Next, I'm going to "plant" my green bean seeds between the paper and the plastic cup."
- "Can you see my seeds? Good!"
- "My cups will stay in the classroom. You're going to take yours home."
- "What do you think will happen?"
- Write "Seeds in a cup" in science journals.



#2) Morning Glory

Prep: Print morning glory blackline on different colors of construction paper and cut to separate.

Supplies: Tubs filled with about an inch or so of water. Scissors. Recycling bin for scraps.

"How do flowers open?"

"Have you noticed the small daisies on the playground? Do they look different on cloudy cool days?"

"Some flowers open every morning as the sun warms their sap. The sap moves up the stem to the flower petals, as the petals fill with sap the flower opens."

"Let's test this."

Demonstrate: "Which lines are for cutting? What are the other lines for?"

"I'm going to cut all around the outside of the flower and put my scraps in the recycling bin."

"Now it's time to fold. Remember, folding is bending and creasing on a line."

Fold two petals, side by side.

"What shape did I make?" (heart)

Fold one more petal.

"Oh, look! I have a tiny envelope!"

"Now I have my flower. Watch the next step carefully. It's like a short movie and can go very fast."

"I'm going to gently set my flower on top of the water."

"What happened?"

"Did you see the water soak into the fibers of the paper?"

"Your turn!"

Wet flowers go into the trash. Head to science area.

Write "Morning glory" in science journals.

Date
Morning Glory

#3) **Chlorophyll**

Supplies: economy paper plates

- Take children to an outside area with grass they can pick by the handful.
- "This is our last lesson on plants. Who remembers what plants need?"
- "Use your eyes and look around. I see blue sky and I see a lot of another color.
 What color is it?" (green, hopefully!)
- "Do you know what makes the green color in plants?" (chlorophyll)
- "Chlorophyll is both a color and a chemical. When plants turn water and carbon dioxide (from the air) into oxygen and sugar it's called photosynthesis. A chemical called chlorophyll helps make photosynthesis happen."
- "Now we're going to see if we can squeeze some chlorophyll onto our plate."
- Demonstrate picking a handful or two of grass and putting it on plate.
- "Now I put my plate on the sidewalk. Who knows how to do the Twist?"
- "First I step on the grass on my plate and twist my foot back and forth."
- Lift up plate.
- "Be sure you dump your grass back onto the grassy area when you're done twisting."
- Smell plate
- "Mmmm! Smells like sunshine or when Mr. Miller mows our lawn. Not it's your turn!"
- When finished, lineup to return to science area.
- Write "Chlorophyll" in science journals.

Last Science

(How you wish to do this is entirely up to you, of course. The following is a celebration of the science school year that took me a decade to settle on.)

Supplies: Smallish agates from http://www.therockshed.com/crushedrock.html , small velour pouches from http://www.pouchmart.com/2-x-2-5-velour-bag-10-pcs/ , certificates included.

"Today is our last kindergarten science day. We've learned about germs, our hearts, air, plants, flight, shadows. our five senses, cow magnets, sink or float..."

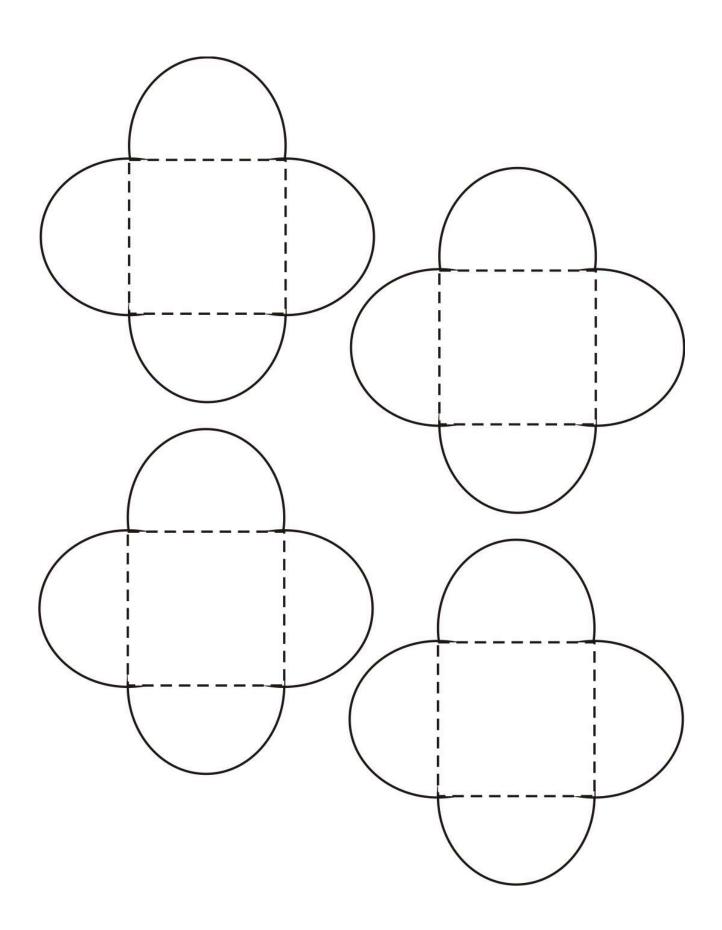
"After our kindergarten program, I'll send home your science journals and this certificate."

"Here's what we're going to do today. Everyone will get a turn to come up, pick a science remembering stone and pouch, and then tell everyone what their favorite science lesson was and why."

"Try and pick something different from your friends."

"I enjoyed teaching all of you. I hope you continue to investigate and learn about your environments."

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Resource list

Science teacher books:

Zero to Einstein in 60, Hixon, Kralik, Hutson & Robertson, The Wild Goose Company 1989

Play and Find Out about Nature: Easy Experiments for Young Children (Play and Find Out Series) Janice

VanCleave 1997

Wonder House & Wonder Boat, Elizabeth M. Fitzgerald assisted by The Magic House, St. Louis Children's Museum 1994 (out of print)

Literature:

- What is a Scientist? by Barbara Lehn
- Wild Birds by Joanne Ryder
- Have You Seen Birds? by Barbara Reid
- Wonderful Worms by Linda Glaser
- Autumn Leaves by Ken Robbins
- Animals Should Definitely Not Wear Clothing Judi Barrett

"Let's Read and Find Out Science" series

- Air is All Around You Franklyn M. Branley and John O'Brien
- What Makes a Shadow by Clyde Robert Bulla
- Hear Your Heart Paul Showers
- Mickey's Magnet by Franklyn Branley
- My Five Senses by Aliki
- How People Learned to Fly by Fran Hodgkins
- How a Seed Grows by Helene Jordan
- Wiggling Worms at Work by Steve Jenkins

DVDs:

Reading Rainbow, Germs Make Me Sick

Sid the Science Kid, The Big Sneeze

Sid the Science Kid, What's That Smell?

Reading Rainbow, Bored Nothing To Do

Bill Nye the Science Guy's Flight

Sid the Science Kid, Sid Wings It

Glo Germ Lotion: www.glogerm.com