



AMERICAN ELM DISTRICT



Volume 5, Issue 10
Dec. 8, 2005

Welcome to American Elm District Cub Scout
Roundtable Electronic edition
Webelos activity badges Fitness and Scientist

Theme: Music Magic

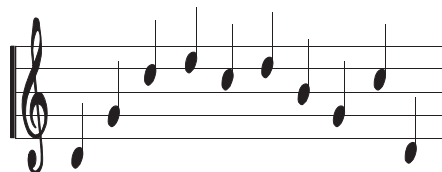
PRE OPENING ACTIVITIES

Music Puzzle

Start



Finish



Louis Armstrong Opening

By Heart of America

Before Louis Armstrong became world famous, he spent a lot of time walking in his neighborhood on the south side of Chicago. One afternoon he noticed a small crowd gathered around the street musicians. He stopped to listen and, to his delight, they were playing his improvised chorus of "Struttin' With Some Barbecue." At the finish of the number, Armstrong walked over and said, "Man, you're playing that too slow!" "How would you know?" The musicians challenged. "I'm Louis Armstrong. That's my chorus you're playing!" The next day the pair had a sign next to their tin cup. It read: "Pupils of Louis Armstrong." --Bud Freeman

Show Biz Opening

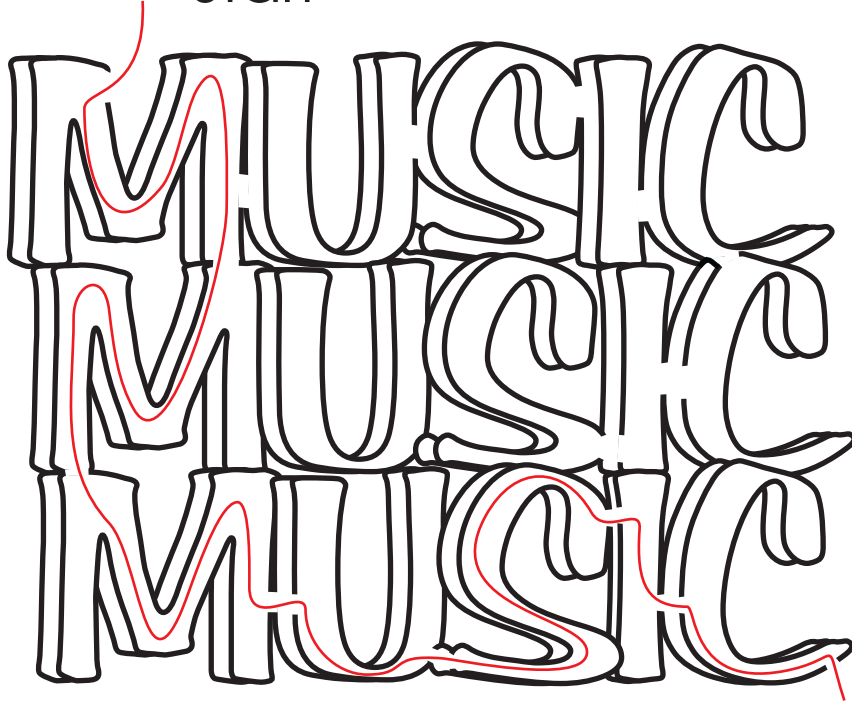
Props: Microphone and television camera (made by Cub Scouts, if possible).

Cubmaster: Tonight TV station _____ is proud to present Cub Scouts on Parade. Strike Up the Band is our theme for tonight and among all the talent and flag waving as sponsors of the truly great show we would like to introduce den _____. (Cubs of den _____ present flags and lead group in Pledge of Allegiance.)

RUN ONS – Cub 1: My brother has been playing the guitar for 10 years now.
Cub 2: He must be very good.
Cub 1: Not really. It took him 9 years to find out he wasn't supposed to blow through it.

Answer to Music Puzzle

Start



Finish

Run ons

- Cub 1: What did you get for your birthday?
- Cub 2: A harmonica. It's the best present I ever received.
- Cub 1: Why?
- Cub 2: My mom gives me a dollar a week not to play it.

JOKE: "IN THE BAND"

By Great Salt Lake Council

- Cub 1, 2, 3 – (All pretend to be limp moving bodies wildly)
- Cub 4 – What is going on?
- Cub 1 – We're play in a band.
- Cub 4 – There's no music! Are you sure your playing in a band?
- Cub 2 – We sure are!
- Cub 4 – Really, what kind of band?
- Cub 3 – We're in a rubber band!

What Do They Play?

- | | |
|-----------------|-----------------|
| 01. Country | A. Taylor Dayne |
| 02. Classical | B. Sisqo |
| 03. Hard Rock | C. Bach |
| 04. Pop Rock | D. Anthrax |
| 05. Oldies | E. Garth Brooks |
| 06. Jazz | F. Korn |
| 07. Alternative | G. Kenny G. |
| 08. Hip Hop | H. Tony Bennett |

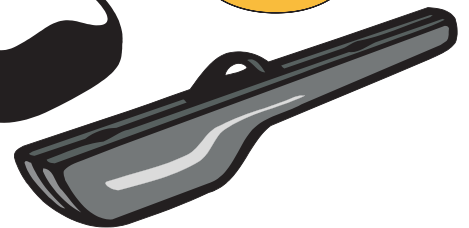
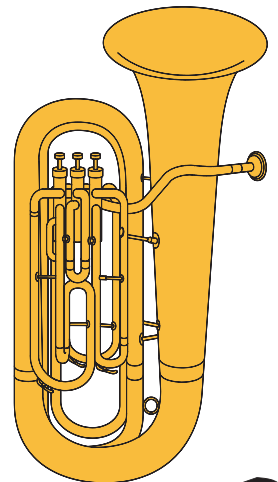
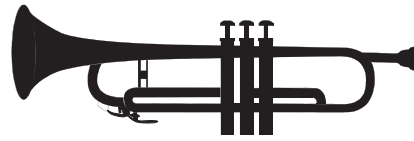
ANSWERS: 1-E, 2-C, 3-D, 4-A, 5-H, 6-G, 7-F, 8-B

Instrument Match up

By Great Salt Lake Council

Draw a line from the instrument to it's name.

- | | | |
|--------|-----------------|------------|
| Guitar | Bagpipes | Electric |
| Guitar | Instrument Case | Tuba |
| Piano | Trumpet | Tambourine |
| Cello | | |



APPLAUSES / CHEERS

1. **KAZOO**-- Pretend to have a Kazoo, put it in your mouth and say "Hmmm".
2. **RHYTHM**-- Using the rhythm of 1, 2, and 3, 4, - stamp feet, slap thighs, and clap hands, etc., then stand up, raise hands overhead, shout, "Hurrah for _____!"
3. **CLASS A**-- Clap hands to this rhythm: 1-2-3-4, 1-2, 1-2, 1-2-3-4, 1-2-3-4, 1
4. **STAMP OF APPROVAL**-- Throw a handkerchief (or something else) into the air, boys stamp their feet until it hits the ground.
5. **KEYBOARD**-- Clickety, clickety, clack, clickety, clack.
6. **DRUM**—Beat on your legs, "rat-ta-tat-tat", three times then on stomach twice, boom, boom!
7. **TROMBONE**-Put one hand on the trombone slide, other on mouth, and say, "Wah, wah, wah!"
8. **CONDUCTOR**—Act like the conductor but have all sing, "For He's a Jolly Good Fellow!"

Skits
THE BAND

Costumes can be a poster hanging around each boy with the picture of the instrument he is representing. The instruments walk in mumbling and grumbling.

Violin: Well everyone knows the importance of strings. As head violin, my lovely tones ring.

Cello: Really, you must be a riddle. You may carry your family name, but to us you are a fiddle.

Drum: Now, now, just go take a seat, for without my rhythm, you'd have no beat!

Cymbals: As Kettle Drum, you're more kettle than not. I think of you as an empty pot.

Drum: If I were you, I think I'd keep hid, or else we will replace you with a garbage can lid.

Flute: How about flutes or don't we matter? I've never heard such meaningless chatter.

Drum: Now listen, we're all important and without a player, there's not a tune could we carry.

ALL: He's right, that's true.

Leader: Let's all take a lesson from this fuss. The boys are most important and them comes us!

THE MERRY MUSIC MAKERS

By Great Salt Lake Council

(Adapted from skit "Merry Music Maker Mob" (Cubs are seated, each playing instruments. If instruments listed are not available, choose your own or omit some of the lines.)

Cub 1: (Enters) That looks fun. Is it hard to play an instrument?

Cub 2: (Playing drum) Well, my parents 'drummed' it into me that playing an instrument takes patience and hard work.

Cub 3: (Jaw Harp) Mom was always 'harping' that I needed to practice, and she was right!

Cub 4: (String instrument) I always like to just 'fiddle' around.

Cub 5: (Pipe chime) When I play, I just 'chime in' anywhere.

Cub 1: Can I join in your band?

Cub 2: Sure. If you had a trumpet, you could 'horn in' anytime.

Cub 3: I can loan you a 'mouth organ' (harmonica). Then I'll be an 'organ donor'.

Cub 4: (hands Cub 1 a kazoo) Here, try this, 'Kaz-oo' need to have fun making music, too.

Cub 5 optional line: (to audience) We have Kazoos for all of you, "kaz-oo' all need to join the Merry Music Makers.

(Inexpensive kazoos can be purchased at any party supply store such as Oriental Trading.com. Or, make your own kazoos with a comb and some wax paper.)

Jokes

By Heart of America

Knock, knock
Whose there?

Radio
Radio who?

Radio not, here I come!

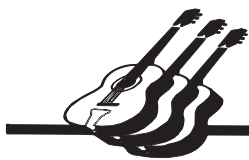
Why are pianos hard to open?
The keys are inside.

What does an alligator sing?
Scales

What does a rabbit like to listen to?
Hip hop - get it?

Flint Stone/Lawrence Welk

Put some rhythm in your body as you say Ah1 and Ah2 and A Yabba dabba doo!



AUDIENCE PARTICIPATION

Rhythmic Exercises

By Heart of America

Ask the group to follow your instructions:

Everyone stand
 Now, hands on your hips, hands on you knee.
 Put them behind you, if you please.
 Touch your shoulder, touch your nose.
 Touch your ears, touch your toes.
 Raise your hands, high in the air,
 At your sides, on your hair,
 Above your head, as before,
 While you clap, one- two, three- four.
 Now, hands upon the empty space (head)
 On your shoulders, on your face.
 Then you raise them us so high,
 And make your fingers quickly fly.
 Then you stretch them out toward me,
 And briskly clap them - one, two. three.

Caliope

Divide audience into 4 groups.

Group 1 says: OOM pa pa OOM pa pa while playing a trumpet with fingers and bending knees as they sing.

Group 2: OOM tweddle dee while playing a piccolo with fingers and bending knees as they sing.

Group 3: OOM BA BA OOM BA BA while playing a tuba and holding it and bending knees as they sing.

Group 4 sings the melody:
 Daisy, Daisy, give me your answer true.
 I'm half crazy, all for the love of you.
 It won't be a stylish marriage,
 I can't afford a carriage.
 But you'll look sweet, upon a seat,
 Of a bicycle built for two.

Orchestra

WOLF: Howl at the moon **MOON:** Get up
DRUMS: boom, boom **TREES:** Wave arms
CYMBALS: Clang, clang **HORNS:** Toot, toot
CURTAINS: 2 people stand together then part
SUN: sit down

The **ORCHESTRA** plays and the **CURTAINS** part.
 The **TREES** wave in the breeze. The **SUN** sets. The
MOON rises. And a **WOLF** enters howling. Did you
 ever see such a gathering of nuts?

For the Birds

BIRD: tweet, tweet **CAT:** Meow, meow
SING: Tra-la, tral-la **DOG:** Bow wow

I had a **BIRD** who **SINGS** so sweet. He sits upon my
 finger waiting for a treat. My **CAT** was cold and
 mean and did not like my **BIRD** to **SING**. The **DOG**
 he chased my **CAT** up in a tree and sat down there
 to wait for me. My **CAT** jumped down upon the
 round and the **DOG** then chased her round and
 round. Then the **BIRD** who **SINGS** so sweet was
 eaten by my **CAT**. Oh, What a treat. Which goes to
 sow, the **CAT** is up a tree, this story is for the
BIRDS, I've gone to the **DOGS** and there is no one
 left to **SING**.

Advancements

Show Biz Advancement

Cubmaster: Now, on with the show: First on stage
 tonight we like you to focus your eyes on one of the
 greatest acts to come to the stage. It is the Bobcat.
 As you all know, the Bobcat is the first badge to be
 earned in Cub Scouting. (Names of the boys to
 receive badges are called.)

This act is followed by yet more great acts, which
 come in the form of the Wolf! (Cubs to receive Wolf
 are called forward.)

Next to preform on the stage is the Bears! Now don't
 be scared, their trainers have complete control of
 them. Will _____ please come forward?

As one of the final performances tonight, we would
 like to remind our Cub Scouts to always do their
 best and join me as we repeat the Cub Scout Oath.

Music Award Night

It's Music Award night! The ultimate awards
 presentation. The Cubmaster is dressed in his finest
 as he emcees the awards. "Oscars" cut from gold
 poster board are presented to the boys (along with
 their advancements) for such things as : Best
 performance as a Bobcat by and eight year old.
 Most impressive Wolf call, Best back up Denner
 earning an arrow, etc.

Songs

Cub Scout Vespers

Softly falls the light of day
As our campfire fades away
Silently each Cub should ask
Have I done my daily task?
For my county, done my best?
Prayed to God before my rest?
Helped a friend along the way,
Have I done my best today?

Taps

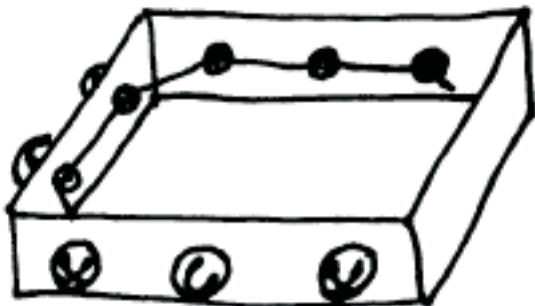
Day is done, gone the sun
From the lake, from the hills, from the sky,
All is well, safely rest, God is near
]Thanks and praise for our days
"Neath the sun, "neath the stars, "neath the sky.
As we go, this I know. God is near.

Boom Chick- Boom

(Repeat * each line after leader)

I said a BOOM*
I said a Boom chick-A-Boom*
I said a Boom chick-a-Rocka, chick-A-Boom*

Uh-huh*
Oh, yeah*
One more time*
(1) Louder
(2) Valley style
(3) Cowboy style
(4) Baby style
(5) Real high
(6) Real low
(7) Rock it!



Chicken Lops and Lizard Hips

Oh, when I was a little kid I never like to eat.
Mama'd put things on my plate, I'd dump them on her feet.
But then one day she made this soup, I ate it all in bed,
I asked her what she put in it, and this is what she said:
Oh, chicken lips and lizard hips and alligator eyes,
Monkey legs and buzzard eggs and salamander thighs,
Rabbit ears and camel rears and tasty toenail pies,
Stir them all together, it's mama's soup surprise.
I went into the bathroom and stood beside the sin,,
I said, "I'm felling slightly ill, my stomach's in a kink."
Mama said, "I've just the thing, I'll get it in a wink,
It's full of lots of protein and vitamins, I think."

Down by the Bay

(Repeat lines*)

Chorus:
Down by the bay*
Where the watermelons grow*
Back to my home
I dare not go*
For if I do*
My mother will say, "Did you ever see....
Down by the Bay

Verses:

1. a bear combing his hair?
2. a bee with a sunburned knee?
3. a moose kissing a goose?
4. a fly wearing a tie/
5. a whale with a polka dotted tail?
6. a stripped frog singing on a log?
7. a time when you couldn't male a rhyme?

Musical instruments to make

By Great Salt lake Council

SWANNEE WHISTLE

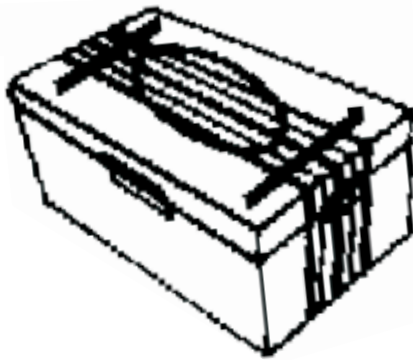
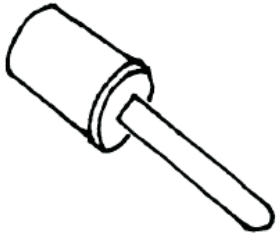
You Need: drinking straw, skewer or poultry lacer, electrical tape
Wrap electrical tape around one end of skewer until it fits snugly but slides easily into the straw. Blow across the top of the straw to produce a note. Change the pitch by sliding the skewer up and down.

TAMBOURINE

You Need: small box, hole punch, jingle bells, string, paint, markers, etc. to decorate:
Punch holes around the edge of the box (leaving a space for holding tambourine when playing it). Tie end of string to first bell and feed string through first hole. Feed end of string out through next hole and put another bell on the string. Feed the string back through the same hole so that the bell sits right over the hole. Continue until all holes have a bell, tying a knot at the last bell. Decorate.

FILM CANISTER MARACAS

You Need:• 2 film canisters, 2 craft sticks, rice, beans, beads, or small gravel, etc.- try different things – each makes a unique sound.
Cut a slit in the canister lids. Fill canisters about 1/3 full of beans or etc., and replace lids. Push craft sticks through slits. Decorate.



DULCIMER

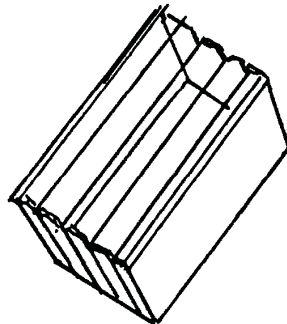
You Need: shoe box, brown paper sack, 4 large rubber bands, 3 pencils, crayons / markers / stickers, tape, scissors. Using a shoe box, cut a hole about 3"x5" in the lid. Put the lid on the box and "wrap" the box with a brown paper sack, which has been cut flat. Poke through the middle where hole was made in the lid, and cut to the corners of the hole. Fold the excess paper inside the box and tape it. Decorate the box with crayons, markers, stickers, etc. Stretch 4 rubber bands around the box, lengthwise, and put a pencil under the elastics near both ends. It is ready to strum or pluck with your fingers or a pick. Change the tone of each string by using the eraser of a pencil to push down the strings at various places.

Troubadours

By Grand Canyon Council
Your Troubadours can make beautiful music together with these ingenious instruments.

Shoe Box Strummer

Made by putting rubber bands around a box, fitting each band into grooves cut into box ends.



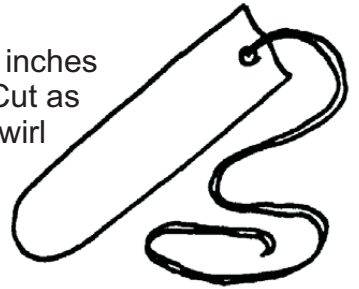
Balloon Rumbler

A blown up rubber balloon with four paper clips inside it. Shake rhythmically.



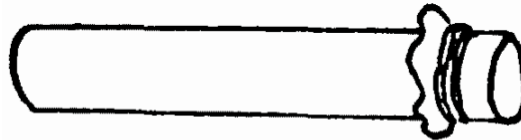
Bull Roarer

A thin wood slat about two inches wide, twelve inches long. Cut as shown, sand smooth and twirl overhead on end of long String.



Bottle Maracas

Catsup bottles filled with small bolts and nails.



Kazoo

A cardboard tube with wax paper fitted over end and secured with rubber band (as shown). Play by humming into open end.



Wash Tub Fiddle

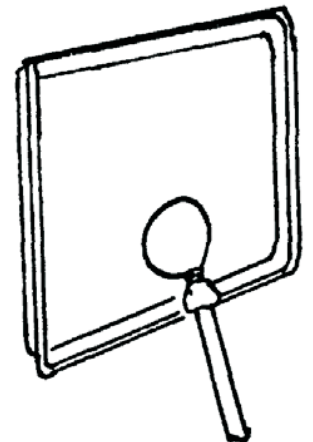
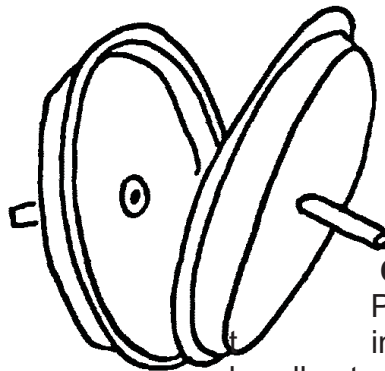
A length of plastic cord tied to an upright stick and screw eye which is secured in center of tub. Play by pulling against stick and moving gloved hand down cord to get variety of tones.

Tin Can Tom-Tom

A large fruit juice can with top of strong wrap ping paper. Beat it with eraser end of pencil.

Kettle Drum

A metal tray, beaten with broom handle which has old wool sock tied around it.

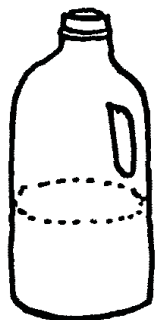
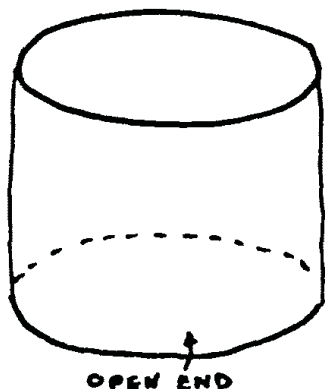


Cymbals

Punch screw holes in the center of two in pie Plates. Screw dowel stick handles to each as shown.

Drum

Get a plastic bleach container. Saw it off just below the handle. Use bottom for drum head - drum with fingers or dowel sticks.



PING-PONG DRUM

What you need:

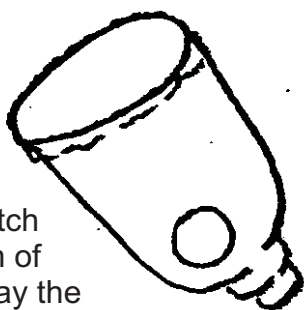
- 1 large round balloon
- 1 small plastic soda pop bottle

- 1 Ping-Pong ball
- plastic tape

Directions:

Cut top off balloon, below the neck. Cut the bottom off the bottle. Hold bottle, bottom up, between your knees.

Put Ping-Pong ball in the bottle. Use both hands to stretch balloon tightly over the bottom of the bottle. tape in place. To play the Drum, shake the bottle. Change the tone by holding your hand over the open end.



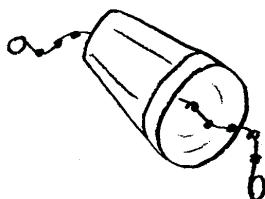
KNOT POPPER

What you need:

- foam cup
- pencil cord or heax3r string
- 2 metal or rubber washers

Directions:

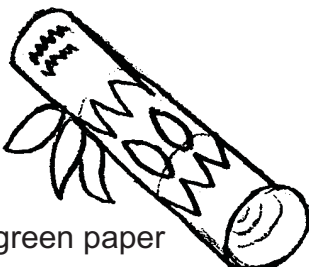
Cut a long length of cord. Make knots along the cord, close to each other. Make a small hole in the bottom center of a foam cup (it is important to make the hole just a little .smaller than the knots. If the hole is too big, get another cup and use smaller object to make hole. Feed one end of the cord through the hole. Tie a washer to each end of the cord. To play, pull cord back and forth through cup.



LOG DRUM

What you need:

- 3 or more large fruit juice cans
- strong tape; 2 sticks
- grocery bags
- scissors, crayons or markers, green paper



Directions:

Remove both ends from three or more cans with adult supervision. Tape the cans together to form a log. Cut out enough brown paper to wrap around the log. (You may need two or more to cover the log.) Roll the paper around the log and tape it in place. Draw a wood grain design on the paper with crayons or markers. Decorate with green leaves and tape underneath the log. To play, strike the log with the sticks to create sounds.

TERRIFIC TAMBOURINES

What you need:

- Aluminum pie plates
- Garbage bag twist ties
- Jingle bells
- Keys, paper clips, buttons, misc.; Ribbons



Directions:

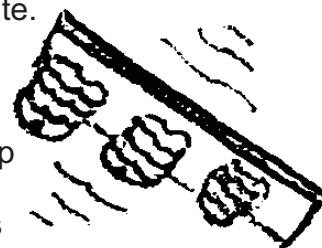
Punch holes around a couple of pie plates with a paper hole puncher. Use the twist ties to attach the bells, keys, etc. to the plates. For dramatic effect, string colorful ribbons through a few holes.

To play, shake or slap pie plate.

BOTTLE CAP CLINKERS

What you need:

- Collect dozens of Old-fashioned glass soda pop bottle caps
- Large nail for punching holes
- 2" nails for fastening caps on wood



Directions:

With adult help, use the biggest nail to punch a hole through the center of each cap. Place 4 caps on each 2-inch nail. Make 4 nails with caps (or as many as your wood will hold.) Hammer the nails halfway into the wood, leaving the bottle caps free to jingle.

To play, shake the finished rattle.

MARACAS

What you need:

- Film containers
- Popcorn kernels, rice, or beans
- Glue...knife
- Popsicle sticks
- Spray paint or musical stickers



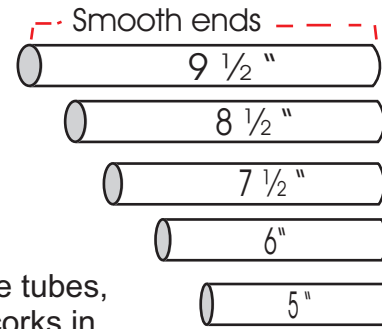
Directions:

Fill one-fourth of each container with the kernels or beans, etc. Place a little glue on the inside of the lid and close tightly. With a knife, make a small slit in the lid and close tightly. Put the popsicle stick inside the lid. Decorate as desired. To play, shake for noise.

Making the Panpipes

1. Cut the PVC pipe into the following lengths:

- 9 1/2"
- 8 1/2"
- 7 1/2"
- 6"
- 5"



2. Align the top ends of the tubes and tape them together.

3. Insert a “cork” of rolled-up plastic wrap into the lower ends of the tubes,

a little at a time, and tune the tubes to G, A, B, D, E. Pushing the corks in

will make the pitch higher, and pushing out with a dowel or stick will make the

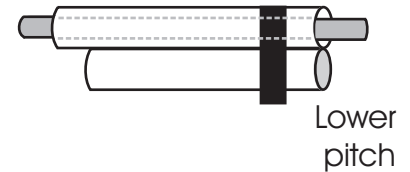
Pitch lower. Note that the “corks” have to be a very tight fit—if any air leaks past, the instrument will not

work properly.

Materials for the Nail Violin

- sheet of 1/2" plywood, about 6" x 12"
- 5 steel common nails:
- 3 size 12d
- 1 size 10d
- 1 size 8d
- violin or cello bow (or Multi-purpose bow)
- pencil or other small stick

Higher
pitch



Making the Nail Violin

1. On the plywood, mark out an arc by using a compass set to 5" (or do it freehand)

2. Starting at the beginning of the arc (about 1" from the edge of the wood), pound in nails about every 1 1/2" along the arc—putting the largest nails at the top and the smallest at the bottom. Don't hammer them too deep—it is easier to hammer them in more than to pull them out.

3. Tune the instrument to the notes D, E, G, A, B. Do this by carefully hammering in the nails for any notes that are too low in pitch, and using the hammer's claws to pull out a little on any nails that are too high in pitch.

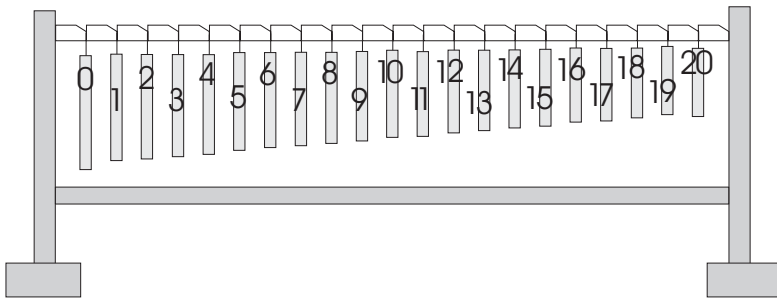
4. Color the third nail (G) red with marker or nail polish to remind you that it is the tonic (“home” note”)

Playing the Nail Piano:

- Hold the instrument in your left hand, with the arc of nails facing up and to the front and the bottom of the instrument resting on your left knee.
- To use the instrument as a nail violin, use a bow (playing near the heads of the nails) to set the nails in vibration
- To use the instrument as a nail piano, use a small stick to strike the nails near the board
- Practice both techniques, playing the notes in scale order and skipping around

Pipe Chimes:

Get **two** 10 foot lengths of 1/2 inch galvanized conduit pipe. Cut pipe to exact measurements (1/8 inch off will change the pitch). Drill a hole for string 1 1/2 inches from the end of the pipe. (For best results, use a drill press). Build a frame to suspend or hang the pipes so that they are free to vibrate when played. For best results use a spoon to strike the pipes, and strike in the center of the pipe. See next page



Size	Note	Number	Size	Note	Number
13 5/8"	A	0	9 7/8"	A flat	11
13 3/8"	B flat	1	9 5/8"	A	12
13"	B	2	9 3/8"	B flat	13
12 5/8"	C	3	9 1/8"	B	14
12 1/4"	C sharp	4	8 7/8"	C	15
11 7/8"	D	5	8 5/8"	C sharp	16
11 1/2"	E flat	6	8 3/8"	D	17
11 1/4"	E	7	8 1/8"	E flat	18
10 7/8"	F	8	7 7/8"	E	19
10 5/8"	F sharp	9	7 5/8"	F	20
10 1/4"	G	10			

Over the River and Through the Woods
Pipes: 3,5,7,8,10,12,14,15

10 10 10 10 7 8 10 10 10 10 15 15 15 14 12 10
 10 8 8 8 8 8 7 7 7 7 7 7 5 5 5 7 5 10
 10 10 10 10 7 8 10 10 10 10 15 15 14 12 10
 10 15 15 14 12 10 7 3 5 7 10 8 7 5 3

America

Pipes: 3,5,7, 8,10,12,13,15,17

8 8 10 7 8 10 12 12 13 12 10 8 10 8 7 8
 3 3 5 3 5 7 8 8 10 8 7 5 3 3 3

15 15 15 15 13 12 13 13 13 13 12 10
 12 12 12 12 10 8 10 10 10 10 8 7

12 13 12 10 8 12 13 15 17 13 12 10 8
 8 8 8 8 7 8 8 10 8 7

Cub Scout Spirit

Pipes: 7,8,10,12,14,15,17,19

10 12 14 15 14 12 10 19 19 17 15
 10 10 10 7 15 15 14 10
 7 7 7 10 10 8 7

17 17 15 14 19 19 17 15
 14 14 12 10 15 15 14 10
 8 8 8 8 10 10 8 7

10 12 14 15 14 12 10 19 19 17 15
 10 10 10 7 15 15 14 10
 7 7 7 10 1 8 7

17 17 15 14 17 15
 14 14 12 10 14 10
 8 8 8 8 8 7



America, the Beautiful

Pipes: 2,3,4,5,7,8,9,10,12,14,15,16,17,19

10 10 7 7 10 10 5 5 7 8 10 12 14 10 4 5
 7 7 3 3 7 5 2 2 2 5 5 8 8 7
 3 3 3 2 2 2 5 5 3

10 10 7 7 10 10 5 5 17 16 17 19 12 17 9 8
 7 7 3 3 7 5 2 2 14 14 14 12 9 14
 2 3 3 2 10 10 10 9 10

10 19 19 17 15 15 14 14 15 17 14 12 10 15 8
 15 15 14 10 12 10 10 10 14 10 8 8 10
 10 10 10 7 9 7 10 7

5 15 12 12 15 15 10 10 10 12 15 10 17 15
 15 12 8 8 12 10 7 7 14 10
 7 8 8 7 8 7 8 7

God Bless America
By Great Salt Lake Council

8 7 5 7 5 3 10 8 10 12
 3 3 1 00 7 7 8
 0 00 1 1 3

10 12 12 5 13 12 3
 7 8 8 8 8 0
 5 4 3

8 10 12 10 8 10 8 7 8
 8 7 3
 2 1 0

7 8 10 3 8 10 12 3
 7 8
 1 3

10 12 13 7 12 13 15
 7 8 10 3 12
 1 6

17 15 13 12 10 8 13 12 10 15
 13 8 8 5 8 8 7 12
 8 4 3 0 4 3 1 6

17 15 13 12 10 8 13 12 10 8
 13 8 8 5 8 8 7 3
 8 4 3 0 4 3 1 0

Auld Lang Syne
 By Heart of America Council
Pipes: 3, 5, 8, 10, 12, 17, 20

3, 8, 8, 12, 10, 8, 10, 12, 8, 8, 12, 15, 17
 17, 15, 12, 12, 8, 10, 8, 10, 12, 10, 8, 5, 5, 3, 8
 17, 15, 12, 12, 8, 10, 8, 10, 17, 15, 12, 12, 15, 17
 20, 15, 12, 12, 8, 10, 8, 10, 12, 10, 8, 5, 5, 3, 8

Webelos Scenist
MAKE CRYSTALS YOU CAN EAT

By Indian nations Council
 If you've ever eaten rock candy or spooned sugar onto your morning cereal, then you've come face—to—face with crystals. Ice, table salt, glassware and sugar are just a few of the many substances made up of crystals. The best way for Webelos Scouts to learn how crystals are formed in nature is to perform an experiment to make crystals.

Pour one cup of water into a small pan. Cover and bring it to a boil. Turn off the heat and add two cups of cane sugar. Stir until dissolved. Let cool. Pour sugar solution into a tall glass. Tie a piece of clean white string to a pencil or stick and place the stick across the glass so that the string hangs down into the liquid. the glass in a cool place for a few days. In a short time small crystals will form along the sides of the glass. Soon they will begin to cling to the string. After several days large crystals, hard as a rock, will have formed around the string. Lift the string out of the glass and taste some delicious homemade rock candy. Unlike living things, crystals grow by adding layer upon layer of their own substance to the exterior surface. In growing, tiny atoms in a crystal naturally arrange themselves in planes or flat surfaces. They form eventually a geometric pattern in space. Some crystals arrange themselves in a six—sided structure; other in ten—sided or twelve—sided formations. It is impossible to see these tiny atoms when you look closely at a crystal, but the sparkling light you do see is caused by reflection from many inner surfaces of the crystal. Many minerals found in the outdoors are crystals too, Quartz, mica, gold, silver and graphite are some of these. If you are hiking in the woods and find a shiny stone embedded in a duller one, then you've probably ~ discovered quartz. If the shiny stone peels in layers, then you've found mica. Take a good look at all the crystals you find. Examine them under a magnifying glass, and hold them up to the light. You will have begun the exciting study of crystals.

VINEGAR MAGIC

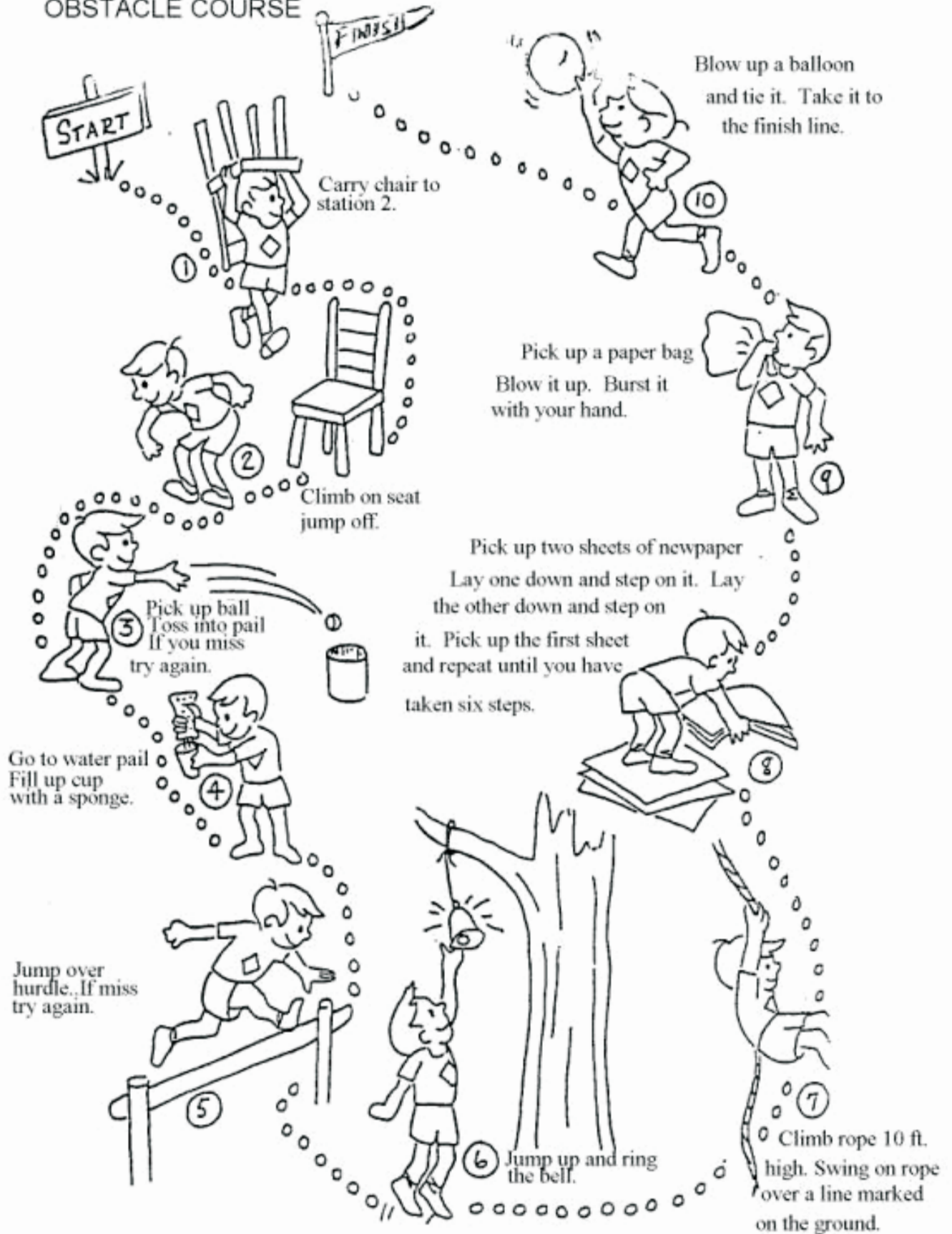
Vinegar combined with baking soda produces carbon dioxide, a colorless, odorless gas. This is what you breathe out when you exhale. It is also the gas that gives soda pop its fizz. Try these experiments with distilled white vinegar.
 Genie of the bottle - Put a tablespoon of baking soda in a bottle. Add vinegar and quickly fit a balloon over the rim of the bottle while the mixture is fizzing. Use a balloon that has been blown up before so that it will stretch easily. The carbon dioxide produced will inflate the balloon.

BOUNCING BUTTONS

Stir a teaspoon of soda into a glass of water. Drop in some buttons and pour in vinegar to make the buttons bounce to the top.

Webelos Fitness Midway

OBSTACLE COURSE



Bubbles of carbon dioxide that have formed are lighter than water and these bubbles lift the buttons. They will bounce up and down for quite a while. Add more vinegar when they slow down.

WELDING GLASSES

Use two matching drinking glasses. Light a candle in the bottom glass and place over it a piece of thick, damp paper. Put the other glass on top. When the candle flame goes out for lack of oxygen, the glasses will be 'welded' together. The heat from the candle drives out enough air so that atmospheric pressure holds the glasses together.

BERMOULLI "S PRINCIIPLE TENT FLATTENING TRICK

Fold a 5.' x 8" piece of paper into a pup tent shape and place it on a table. Now blow through the tent. Does it blow away? No? Why not? The moving air stream through the tent brings down the air pressure. The greater pressure above the tent pushes it down and prevents any horizontal movement.

SWINGING PING-PONG BALL -1

Materials needed:

A ping-pong ball Adhesive tape

1 foot of thread or string Faucet

Fix the string to the ping-pong ball with tape. Turn on the water to form a steady stream. While holding onto the string, flip the ball into the water from a few inches away. Not only will the ball stay with the string at an angle, but you can draw the ball up the stream almost to the faucet.

What happens: the water, streaming around one side of the ball, exerts less pressure than the air which surrounds the other side. Even though you can feel the resistance of the water as you draw the ball upward, the air pressure is still stronger, as the experiment proves.

SWINGING PING-PONG BALL - 2

Materials needed:

Two ping-pong balls Two feet of thread

Mending tape Drinking straw

Tape each ball to an end of the thread and hold the center of the string so that the balls dangle about one foot below your fingers and about one or two inches apart. Have the boys blow through a straw exactly between the balls, from a

distance of a few inches. Instead of being repelled, they will be attracted.

What happens: The air current directed between the ping-pong balls reduces the intervening air pressure. Strong pressure from the far sides pushes the balls together. The strength of the air from the straw will determine how close the balls will come.

FLOATING MAGNETS

Place several round magnets on a pencil or dowel with like poles facing each other, north to north and south to south. Like poles repel each other, so the magnets will float on the pencil. If the top magnet is pushed down and then released, the magnets will spring apart.

AIR CANNON HOCKEY

This game will demonstrate air pressure. Use round cardboard oatmeal boxes. Cut a hole the size of a penny in the tops. Fasten the lid back to the box tightly. Use a table for a field, with a goal at either end. Have a boy sit at each end of the "field" with a cannon (box) and put a ping pong ball in the middle of the table. By tapping the back of the box and aiming it at the ball, try to score by putting the ball through your opponent's goal. The Webelos leader can demonstrate the effectiveness of his oatmeal box cannon by using it to put out a candle. Fill cannon with smoke, then aim at candle, tap back of box, and flame will be put out. These cannons are effective up the about six feet.

WEB SITES

These sites are current as of

Music Room - read up on music history and listen to music samples from different periods.

[Http://www.empire.k12.ca.us/capistrano](http://www.empire.k12.ca.us/capistrano)

National Institute of Environmental Health Sciences -has songs and midis plus activities.

[Http://www.niehs.nih.gov/kids/music.htm#musiccopyrights](http://www.niehs.nih.gov/kids/music.htm#musiccopyrights)

Learn how to scratch a song like DJ's do

[Http://www.turntables.de/turntables99/scratchit8.htm](http://www.turntables.de/turntables99/scratchit8.htm)

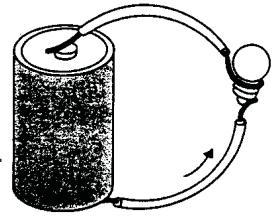
Science in a Box - Simple Circuits by Elizabeth R. Buzard

Objective

To learn about simple circuits through hands-on manipulation of bulb, battery, and wires.

Procedure

- Place the materials listed below in a shoe box to create a self contained science lesson.
- Have the scouts complete the following activities independently, then work on the Challenger.



Science Lesson

- Here are eight ways to connect a battery and a bulb.
- Only four will make the bulb light.
- Can you predict which ones?

Safety Rules

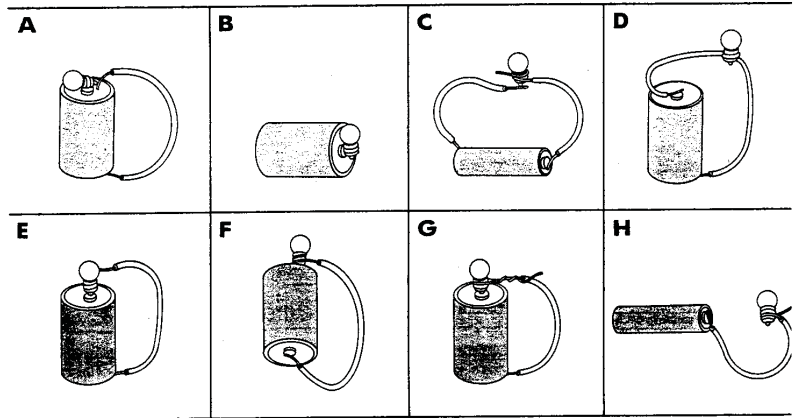
- NEVER put a wire in a wall outlet.
- Disconnect dry cells and batteries when not in use.
- Disconnect wires if they become warm.
- Never work with more than nine volts of electricity.

Materials

- 1 AA battery
- 1 C battery
- 2 flashlight bulbs
- 2 pieces of insulated wire, ends stripped
- 3 strips aluminum foil, folded • cellophane tape

Instructions

1. Following the sample, copy a data sheet.
2. Use it to record your predictions
3. Then test each arrangement and record your results.
4. Answer the following questions.



Questions

1. Is it possible to make a bulb light by: Just touching it to a battery? Connecting it to a battery with one piece of wire? Connecting it to a battery with two pieces of wires?
2. For a bulb to light up, which places on the bulb need to be touched by a battery or a wire?
3. For a bulb to light up, which places on a battery need to be touched by the bulb or a wire?

Explanation:

A bulb lights because electricity is flowing. The pathway the electricity follows is called a circuit. A circuit is a kind of loop. (The word circuit may make you think of circle. Does a circle have a beginning or end?) A battery is needed to make electricity flow. The drawing on the front of the box shows the whole circuit through the wires, the bulb, and the battery. The arrow shows the direction in which the electricity flows.

DATA SHEET		
Will the Bulb Light? (yes or no)		
Letter	Prediction	Result
A		
B		
C		
D		
E		
F		
G		
H		

Answers to the Science Lesson: A, C, F, and G will light.

Simple Circuits Challenger

Objective

- To make a short circuit.

Procedure

Q: Will circuits A and B light up?

1. Record your predictions.
2. Fold three pieces of foil into strips.
3. To test your predictions, assemble circuit A and circuit B as shown.

Explanation

- The electricity in circuit B never reaches the bulb. Instead, it takes a shortcut along the third strip of foil.
- In your own words, explain why you think this arrangement is called a short circuit.

Materials

- battery
- small bulb
- cellophane tape
- aluminum foil (folded into strips of "wire")

