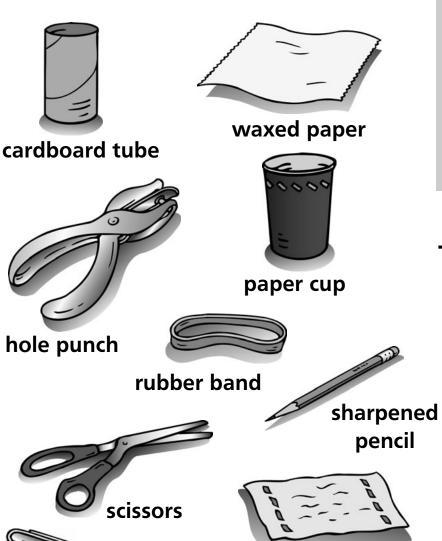
Chapter Science Investigation

Name _____

Making Musical Instruments

WHAT YOU NEED



Find Out

Do this activity to see how different instruments sound.

Process Skills
Observing
Communicating

Time

- 1 hour to make musical instruments
- 40 minutes to play instruments and record sound





beans

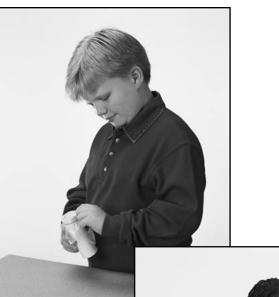
coffee can

string

paper clip

wet paper

towel



WHAT TO DO

1. Make a kazoo. Punch a hole in the cardboard tube. Cover the end of the tube with a piece of waxed paper. Put the rubber band around the tube.

Be careful with sharp objects and rubber bands.

2. Make a musical cup. Punch a hole in the bottom of the cup with a sharpened pencil. Put a piece of string into the hole. Tie a paper clip to the end of the string and pull the other end of the string through the hole. Wet the string with a wet paper towel.

- **3.** Make a shaker. Fill a can with beans. Put the lid on the can.
- Play each instrument.
 Observe and record what you hear.
- **5.** Play the kazoo first. Next, make a sound with the shaker. Then play the musical cup.
- **6.** To play the cup, hold it in one hand and use the fingers of your other hand to pull down on the string.



Circle *loud* or *soft* to describe the volume.

Circle *high* or *low* to describe the pitch.

Write the name of something that sounds like the musical instrument.

Musical Instrument	Volume	Pitch	Sounded Like
kazoo	loud soft	high Iow	
musical cup	loud soft	high low	
shaker	loud soft	high low	

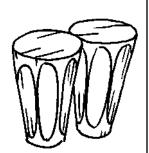
Conclusions

Which musical instrument had the loudest volume?
How did the instruments sound alike? How did the instruments sound different?
lew Questions
What could you do to change the way each instrument sounded?
Write a new question you have about sound.

Lesson 1 • How Sound Is Made



Draw a picture of your drum.



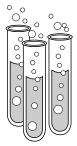
Lesson 1 • How Sound Is Made

What Happened How do you make a sound with your drum?	
② What part of the drum vibrates?	
What If	
What are other ways that you could make sound with your drum?	

Name _____

Lesson 2 • Volume

Name _____





Changing Volume

Record what happened to the sound when you added the cup.

Predict what would happen if you covered the cup with your hand while you blew into the straw.







Lesson 2 • Volume

Name	
What Happened	
Which time was the sound loudest?	
What caused the sound to be louder?	
What If	
How could you make the sound even louder?	

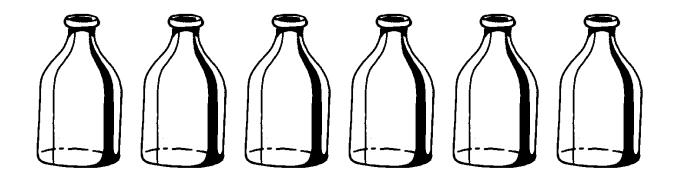
Lesson 3 • Pitch

Name _____



Making a Bottle Instrument

Draw how much water is in each bottle.



Predict which bottle will make the highest sound when you tap it. **Write** an *H* on that bottle.

Circle the bottle that made the highest sound when it was tapped.

Lesson 3 • Pitch

Name	
What Happened What did you notice about the amount of water in each bottle and the noise it made?	
	-
What is vibrating to make the sounds?	_
	-
What If	
What would happen to the sounds if you added more water to each bottle?	
	-