Let's Rock and Roll!
STEAM Activities

Life follows a rhythm... and we hold the drum.

~Tom Althouse
DIY Music Instruments

On the following slides, you will find directions for making several different musical instruments from items you may have at home. Choose one of these or make up your own design for a musical instrument. Take a photo or video of you with your DIY instrument and post on our Facebook page.
Homemade Harmonica

Harmonicas are fascinating, with their petite size and distinct sound, but how do they work? If you take a look at the inside of a harmonica, you will see that thin strips of brass—all different lengths—vibrate when you breathe into the harp.

You can mimic this setup by taping different sized straws together and blowing into the airways. You just need straws (non-flexible work best) and tape. Try straws of different widths to see if the sounds change.
DIY Drum Set

Drums create the rhythm to a tune, making this instrument a key element in a tempo lesson. Whether you dance to the beat or sing along with the percussion, drums are a great guide.

Create your drums at home by using various sized metal cans, balloons (7”), and rubber bands. All you need is a drum stick to tap along with. Tinker Toys, wooden dowels, or pencils with cap erasers work well!
Paper Plate Tambourine

You'll need: 2 heavy-duty paper plates, hole punch, string or yarn, jingle bells, and markers or crayons.

Hold two paper plates face to face and punch holes around the perimeter of the plates about an inch and a half apart to string your yarn.

Take your length of yarn and weave it up through a hole, around the outside and back up the same hole again and tie a knot to secure the plates together. Then, string a jingle bell through your yarn and continue weaving your plate. Alternate your jingle bells every other hole or more, depending on how many bells you have.

When you get back to the hole in which you started, tie off your yarn again and let your child decorate his DIY instrument to make it his own. Then, shake to play!
Water Bottle Guiro

You may be hard pressed to find a washboard laying around for the band, but an empty water bottle has the same effect!

You’ll need: an empty, dry 16-ounce water bottle with ridges, chopstick or unsharpened pencil, paint (acrylic is best).

Pour a small amount of paint inside the water bottle and swirl around to coat. Let dry. Replace cap.

Hold the empty water bottle in one hand with the cap facing away from you. Take the chopstick and hold it in your other hand. Rub the ridges of the water bottle up and down to make music to your ears!

Hint: Add some glitter to your paint for a cool finish!
Rain Stick

You will need: a sturdy cardboard tube (like from an aluminum foil roll), paint or markers, brown paper bag, yarn or ribbon, rubberbands, scissors, pipe cleaners and/or craft wire, and beads, rice, dry beans, or other material for inside the rainstick.

Start by painting or coloring your cardboard tube to resemble a piece of hollow wood. Let it dry.

Cut out two circles from a paper grocery bag. Crumple the paper up to make it soft and look worn. Then cut some fringe around the outside of the circle.

Attach one circle to the end of your cardboard tube using a rubber band.

Fill your rain stick with twisted pipe cleaners or craft wire and beads, rice, or dry beans. You might even try a combination of those to get the sound you most like.

Once you're happy with the sound of your rainstick, rubberband the other paper circle to the opposite end.
Paper Plate Banjo

You will need two thick-weight paper plates, staples and a stapler: rubber bands, a paint stick or ruler, and three beads. Use stickers or markers to decorate your banjo.

Stack two thick-weight paper plates and staple them together for durability.

Color or paint the stacked plates with your favorite colors and decorate them with stickers.

Attach a paint stick (or ruler) to the back of the stacked plates and glue beads to the end as the pegs. Finally, add strings by stretching rubber bands around the stacked plates.
Water Xylophone

If you’re looking for an instrument with a multitude of sounds, you may want to make this musical water xylophone.

Fill glass cups with different amounts of water, then add food coloring to tell the glasses apart. Arrange them from the least to most full.

Tap the glasses with a spoon and notice all the different tones that are produced.

Start on a beat to a certain tempo with one cup, and you can join in with another sound or a different cup. Soon you’ll be on your way to making your very own homemade musical masterpiece!

Adjust the water levels to create different tones. Experiment with differed sized glasses. Try the activity with plastic or metal cups to see how the tones change. Compose a song for your water xylophone.
TP Roll Kazoo

You will need a TP roll, wax paper, scissors, rubber band, and paint, markers or stickers to decorate.

Paint or color your TP roll with markers.

Cut out a circle of waxed paper that is larger than the opening of your TP tube by about an inch around. (Use a bowl to make it easy to draw the circle.) Craft scissors or pinking shears will make the edges of the waxed paper fun.

When decorating is done/ paint is dry, wrap the waxed paper around the top of your kazoo and secure with rubber bands.

Sing or hum through the open end of your kazoo!

More: Make a kazoo from a longer cardboard tube! Try using two pieces of waxed paper on a kazoo. How does the sound change?