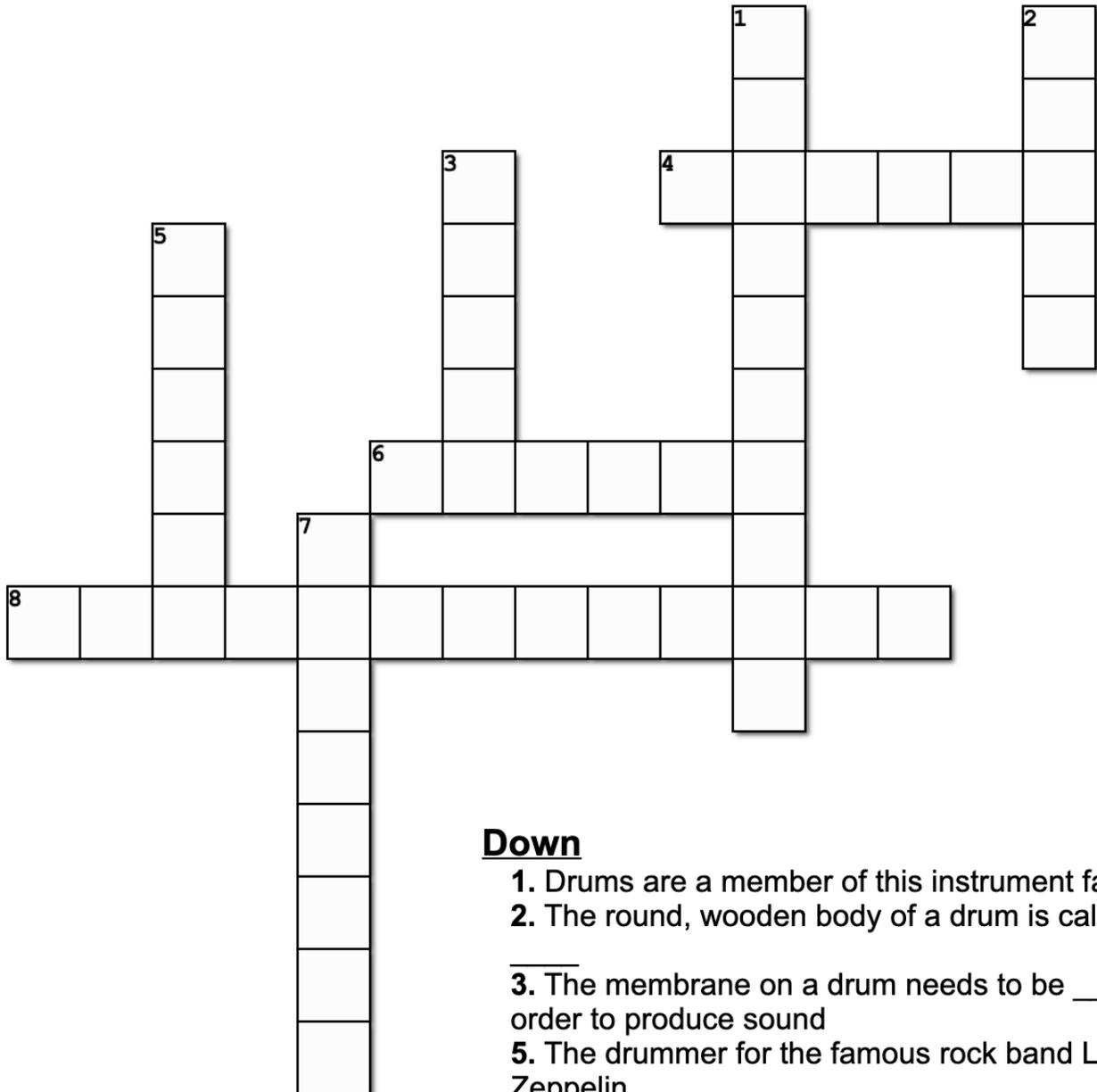


Let's Review

The crossword puzzle below includes terms and ideas we learned about in the YPC video.
Complete the puzzle to see what you remember!



Down

1. Drums are a member of this instrument family
2. The round, wooden body of a drum is called the _____
3. The membrane on a drum needs to be _____ in order to produce sound
5. The drummer for the famous rock band Led Zeppelin
7. This is what we call the tightened 'membrane' on top of a drum

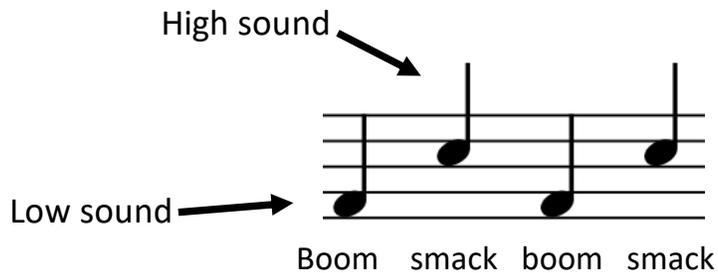
Across

4. A combination of high and low sounds organized into a repeating pattern
6. Drums are played using these
8. A instrument that uses a tightened membrane stretched across it to produce sound

Let's Put it into Action!

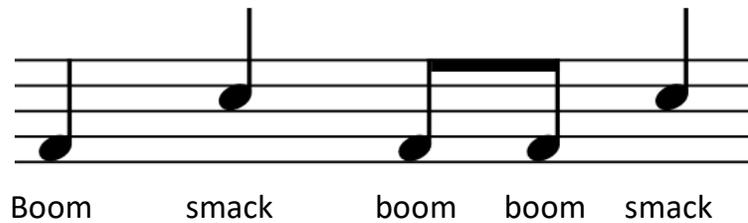
Now that we have learned about grooves, let's try making our own. For the full STEAM connection, try making your own drum (directions below) to play your grooves with.

Remember – a groove is a combination of low and high sounds arranged in a repeating pattern. Check out some of the classic rock groove examples below before you make your own.

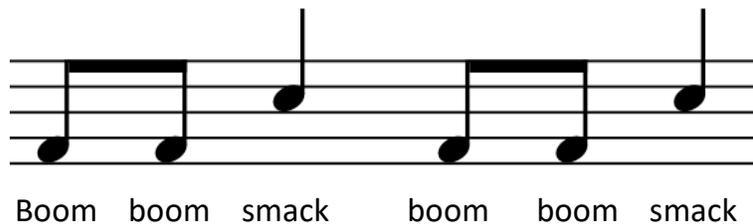


A musical staff with five lines. The first line is labeled "High sound" with an arrow pointing to a quarter note on the second line. The second line is labeled "Low sound" with an arrow pointing to a quarter note on the first line. The notes are arranged in a repeating pattern: Low, High, Low, High. Below the staff, the sounds are labeled "Boom smack boom smack".

Classic Rock Grooves



A musical staff with five lines. The notes are arranged in a repeating pattern: Low, High, Low, Low, High. Below the staff, the sounds are labeled "Boom smack boom boom smack".



A musical staff with five lines. The notes are arranged in a repeating pattern: Low, Low, High, Low, Low, High. Below the staff, the sounds are labeled "Boom boom smack boom boom smack".

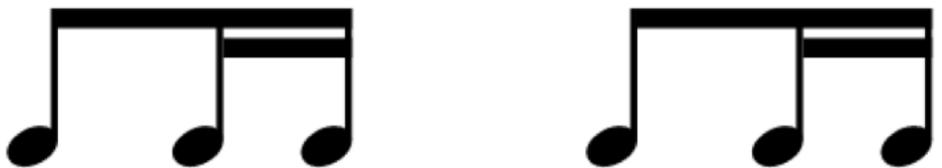


A musical staff with five lines. The notes are arranged in a repeating pattern: Low, High, Low, High. Below the staff, the sounds are labeled "Dooze Gahze Dooze Gahze".

Make Your Own Grooves!

Use the rhythm units below to construct your own grooves.

1. First, cut out the rhythm units below.
2. Choose the rhythm units you want to use in your groove.
3. Arrange the rhythm units in a pattern.
4. Assign some units to have a low sound and some to have a high sound.
5. Play your groove! You can use body percussion – a foot stomp is the low sound and a hand clap is the high sound. Or you can use any low or high sounds you can find at home.



Make Your Own Drum!

Check out the directions below to make your own drum. First, let's see how this activity connects to STEAM.

S**cience:** Remember, drums are *membranophones*, which means they have a tightened membrane (or drumhead) which vibrates to make sound. As you build your drum, make sure the “drumhead” is tightened. If you choose to use other “drums” from around the house, do any of those objects function like a membranophone?

T**echnology:** This refers to the skills, methods, or processes used to achieve goals. Our processes and methods are outlined in the steps above and below and our end goal is to create our own grooves.

E**ngineering:** We will design our own grooves (see above) and make our own drums (see below).

A**rts:** Grooves are found in all types of music. A groove is simply a combination of high and low sounds arranged in a repeating pattern. Revisit the accompanying YPC video to review groove construction and hear grooves in the piece *Bonham*.

M**ath:** In music we count rhythms to make sure all the musicians in a group can play together. The groove examples on page two are all counted in groups of four (1, 2, 3, 4). Each rhythm unit gets one count.

What You Will Need

1. A large, empty yogurt container (10-12 inches in diameter at the opening)
2. A 16 –24-inch balloon
3. Electrical tape
4. Construction paper
5. Scissors
6. Glue/glue stick
7. Rubber bands
8. Chopsticks or pencils for drumsticks

Directions

We got the idea for this activity from <https://www.wikihow.com/Make-Drums-for-Kids>. Visit the link for pictures of the directions below. You will also find directions for making more involved drums (great for older students!).

1. Use the construction paper and glue/glue stick to decorate the yogurt container however you like.
2. Cut the mouthpiece off the balloon (be careful not to cut the body of the balloon). A 16-inch balloon works best for containers under 10 inches. A 24-inch balloon works best for containers 10-12 inches.
3. Stretch the balloon over the top of the container so it is tight. Secure the edge of the balloon beneath the lip of the container using rubber bands.
4. Tape over the rubber bands and the edge of the balloon to secure it to the container.
5. Play your drum using a pair of chopsticks or two pencils.