

Maker Challenge!

By musician & beat-maker Annalise Morley



Calling all Little Inventors!

Your challenge is to explore sound and music around your homes and experiment with materials around you to inspire your very own unique musical instrument creation!

Your instrument can be made from old hangers or recycled water bottles, maybe you'd like to experiment with an empty container or a cardboard box. Everything makes a noise so why not try out the whackiest materials you can think of and see what noises they make!

Annalise's invention challenge



Give these five activities a go to help guide you through the challenge!

- 1. Thinking caps on!** What sorts of instruments could you recreate?
- 2. Ears open!** Explore & record sounds where you are.
- 3. Let's experiment!** What sounds can we make around the house?
- 4. Let's get creative!** Where will your musician use their instrument?

INVENTION SHEET.

Design your very own intriguing musical instrument!

- 5. Make and decorate your musical instrument!** Using cardboard and other recycled materials found around your home, create your own musical instrument.



Annalise Morley is a musician, teacher and beat-maker from London, UK.

Annalise plays different instruments, then creates beats and songs using her instruments, voice and electronic sounds.

She enjoys getting creative with sounds and uses household objects, like mugs of tea and homemade shakers, in her music.

Annalise runs Beats Lab, a club for children and young people to learn how to write their own songs, create their own beats and record their own instruments!



What sorts of instruments could you recreate?

There are 4 main musical instrument families:

Percussion, woodwind, brass and **strings**. Each group of instruments makes sound in similar ways.

Stringed instruments have strings that vibrate.

What could you find at home which could vibrate to make a sound? *(Try an elastic band!)*

Percussion instruments are hollow, you hit them to make sound.

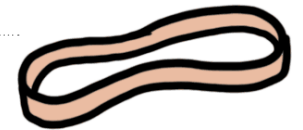
What could you hit at home to create a percussive sound? *(Try an empty container!)*

Woodwind and brass use air from the musician's mouth.

What could you blow air into to create new noises? *(Try a bottle!)*

Be inventive!

Your instrument doesn't have to be based on an existing one. You could try and recreate a duck's quack, bubbles popping or a waterfall!



Write your ideas here!

Testing materials

To decide on materials and features for your instrument, first lets experiment with some sounds around the house.

- 1. Find elastic bands.** Try holding the band in one hand whilst making it ping and vibrate with the other.

What changes when you stretch it out further? Can it make a sound when you don't stretch it at all?

- 2. Turn some pots and pans over on a table.** Put them next to each other and hit them with a spoon. How does the sound of each pan change depending on its size? How does the sound change when you use a different beater?

- 3. Choose a dry ingredient (pasta and rice work well!) and fill up an empty container.** Put the lid on and shake it! What changes when you add more? What happens when you change the size of the container?

- 4. Put a glass on a table.** Fill it with a little water and lightly tap it with a metal spoon.

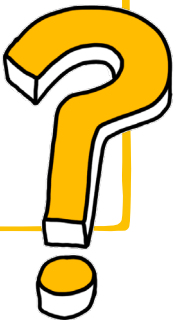
What happens when you fill it with more/less water? Can you play it whilst pouring in more water?

Which experiment was your favourite?



Which was the loudest?

Which was the softest?

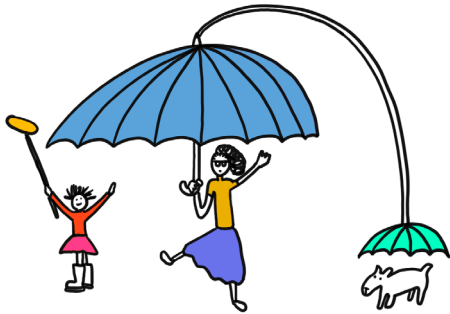


Where will you play your instrument?

When inventing your instrument it's important to think about where you will be playing it.

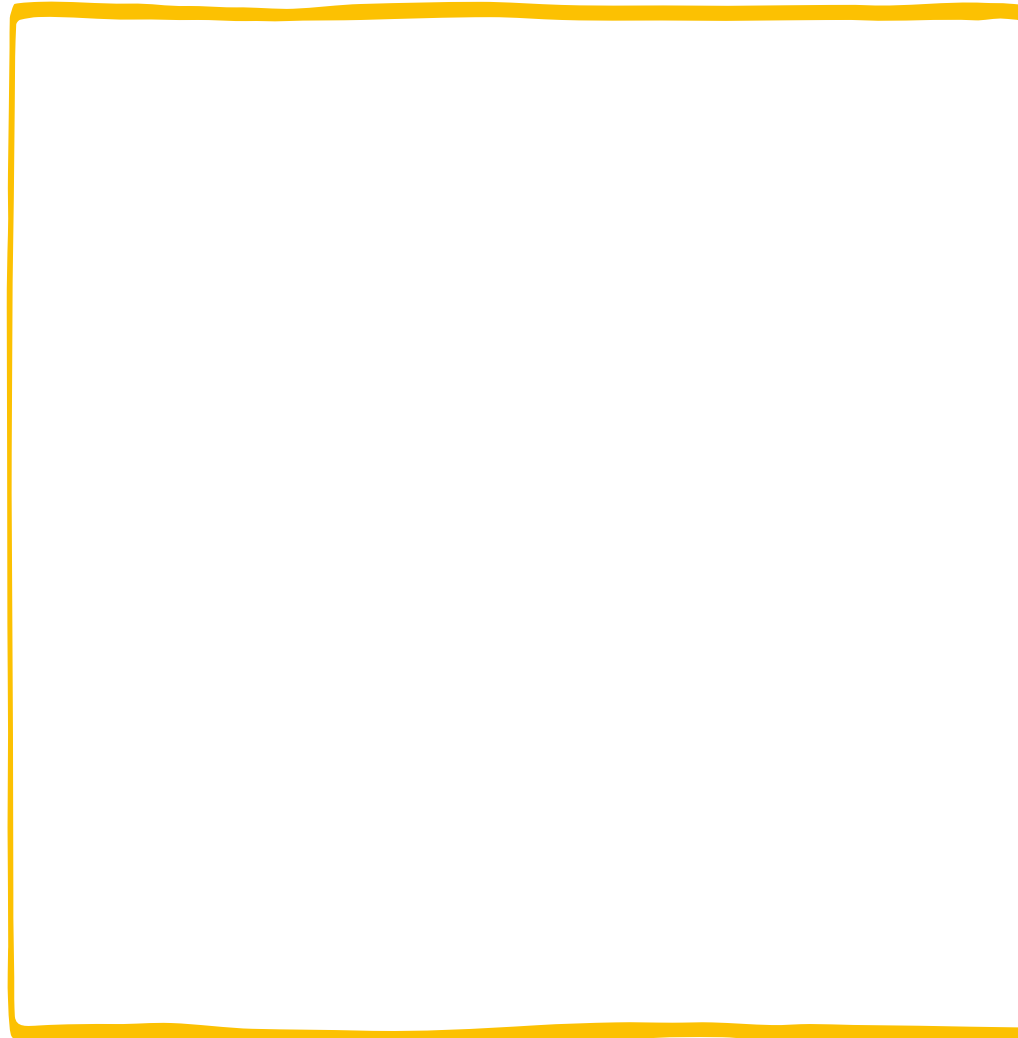
What occasion will it be used for?

- birthday party
- carnival
- school assembly
- bedtime

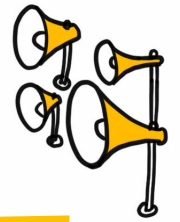


How will your music affect people or animals?

- Stop a baby crying
- Cheer up a sad puppy
- Help your sunflower grow



Draw your musician at their performance!



Who will be performing?

Will they be playing solo or with others?

How loud does it need to be?

Do you need to plug it in to make it louder?



My new musical instrument invention

.....
.....

First name

Age

School

Town/city

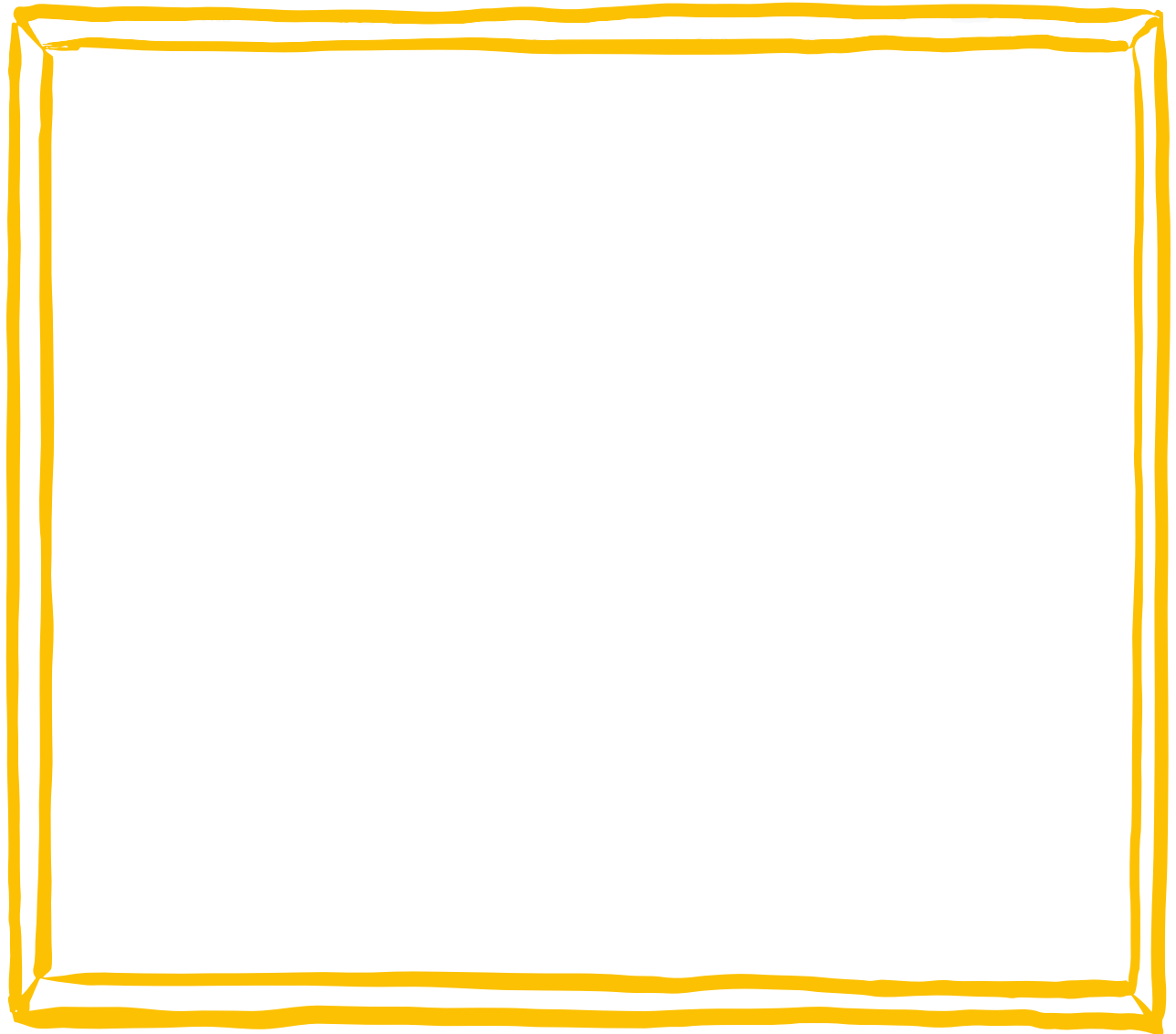
Tell us more!

(who your invention is for, what it does, how it works!)

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.....

Draw your invention here! *Use a black pen, add colours and labels*

Name it!
↙



Upload your idea at littleinventors.org to get feedback and who knows, it could be chosen to be made real!

Make your instrument!

We've done a lot of experimenting and imagining but now is your chance to create your own real instrument!

Use any craft materials you might have at home, clean recycling containers and objects.

Remember you can paint and decorate your instrument however you'd like it. Think about how you might want it to look for you musician and for what occasion they need it for.



If you are creating a percussive instrument you might want to think of an additional beater to make so you can play your instrument.



If you'd like to take your instrument somewhere with you think about how you could add a strap or handle to make it more portable.



If you have designed your instrument for a special performance think about decorating it to be eye catching.



Look back to your Invention Sheet and Activity 2 for inspiration.