

imagination hub: sensory play

In this resource we'll be exploring sensory play. We will look at:

- How to make your own lava lamp
- How to make junk instruments

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let's make a lava lamp

A lava lamp lets you enjoy seeing colourful bubbles going up and down. You can make this with things you can find in your kitchen.

You will need:

- Bicarbonate of Soda/Sodium bicarbonate
- Cooking Oil
- Vinegar
- Food Colouring
- Transparent Jar
- Spoon
- A little cup
- A torch
- A room where you can get darkness

Step 1:

Put a little bicarbonate of soda into the jar (enough to cover the bottom of the jar). Carefully shake the jar to level off the soda.



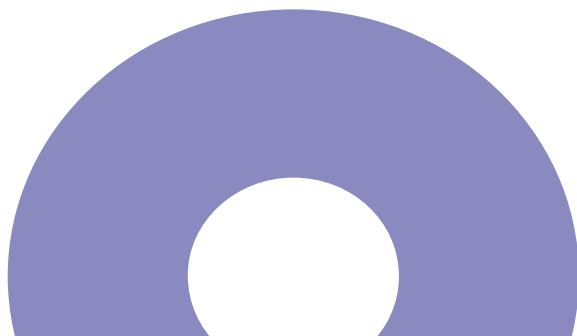
Step 3:

Pour cooking oil into the jar but to no more than 2/3 full. Do not fill the jar or it will overflow later! Now put the jar to one side.



Step 4:

Pour a little vinegar into a small cup.



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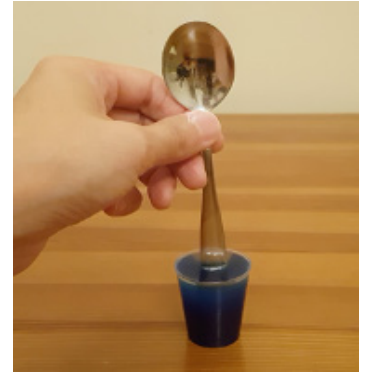
Step 5:

Add food colouring into the small cup.



Step 6:

Stir the vinegar and food colouring mix.



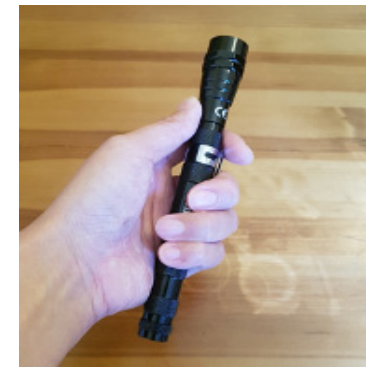
Step 7:

Carfully pour the vinegar mix into the jar with the oil and the soda.



Step 8:

Get a torch ready and turn off the lights.



Step 9:

Point your torch in to the jar.

Ta-dah! You now have a lava lamp.



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experiment challenges

Now you have your lava lamp. Lets play with the torch!

- Place your light beneath the jar. It is the best way to enjoy watching the bubbles.
- Pick up the jar and move the light around it.
- Put your jar on the table and point your torch to the jar.
Can you get the bubbles' shadows on a wall?
- What is the best way to light up the bubbles in the jar?

bubble trouble?

Sometimes bubbles are not very active for the first few minutes. Don't worry. It gets very bubbly a bit later.

The lava lamp will last about 10-15 minutes. If your bubbles die down, you can add more of the vinegar/food colouring mixture to the jar. It will get the bubbles going again. Perhaps you can mix different food colourings to the vinegar so you will have different coloured bubbles.

hack it!

Now you have made some shadows with your lava lamp, here are some ideas to try with some other shadows:

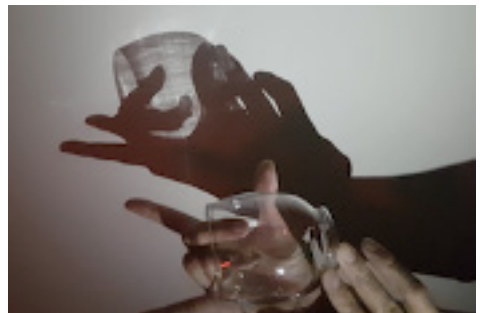
Play some nice and calm music, keep your room dark and experiment!

- Put your hand in front of the torch and see what shapes you can make.
- Move your hand closer or further away from the torch. See how your shadow changes in size.



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- Make shadows on the wall, the corner of your room or ceiling. You can make shadows on your white t-shirt too!
- Look for objects around the house and make shadows with these. Kitchen gadgets like a cheese grater, a sieve or a whisk are fun. Transparent items, like glass, make beautiful shadows as well.
- Cut a square from a plastic bag and colour it with a permanent marker. Then place it in front of your torch. This way you can make coloured shadows!
- You can use any thin paper for a shadow screen, such as printer paper, greaseproof paper, or packing paper. You can also try moving only the torch on the paper screen.
- Fill a tupperware container with water and point the torch through it. You can make shadows with water!



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let's make junk instruments

You can use anything to make junk instruments, but these objects are particularly handy:

- Masking or packing tape
- Elastic bands or a hair bobble
- Jam jar lids
- Ice lolly sticks
- Large plastic bottles
- Scissors or a small cutting knife
- Lentils or rice
- Baking paper
- Pringles tubes, boxes or tubs
- An opened tin with the edges safely covered in masking tape

how to make junk instruments

There is no right or wrong way to make your instruments. Just get creative and enjoy exploring sounds together! It's good to start with a sound you like and build an instrument from there.

Find ways to make the process fun. For example you can start by exploring sounds in your home. You can grab an old pen or a wooden spoon to tap and test how things sound. Try things with different shapes and materials.

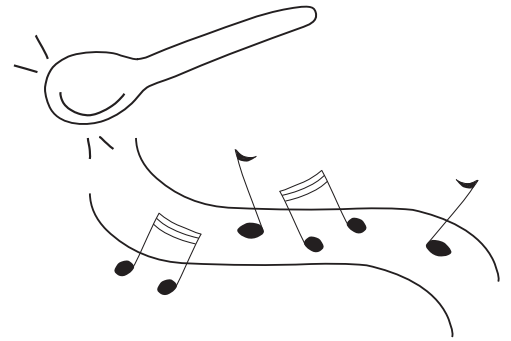
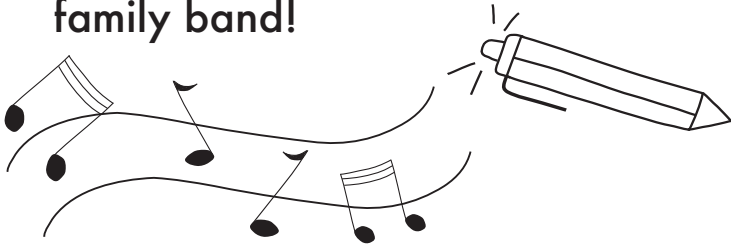
You can use paint, beads and colourful tape to decorate your instruments as much as you like.



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Using mobile phones to record, get members of the family to collect 10 sounds from inside or outside the house. Then ask them to playback the sounds one by one and see if anyone can recognise them.

When you have your instruments, try putting on some music you like, or a few pieces that have different styles, and play along together as a family band!



ideas for junk instruments

If you're struggling to find ideas for an instrument, you can look for two basic elements: a sound source or trigger, and a resonator or amplifier. Here are some examples:

Sound source:
Rubber bands
vibrate when
plucked.



Resonator:
The box takes on
these vibrations,
and makes them
easier to hear.

Sound source:
Blowing across the
top of the bottle
causes the air to
vibrate.

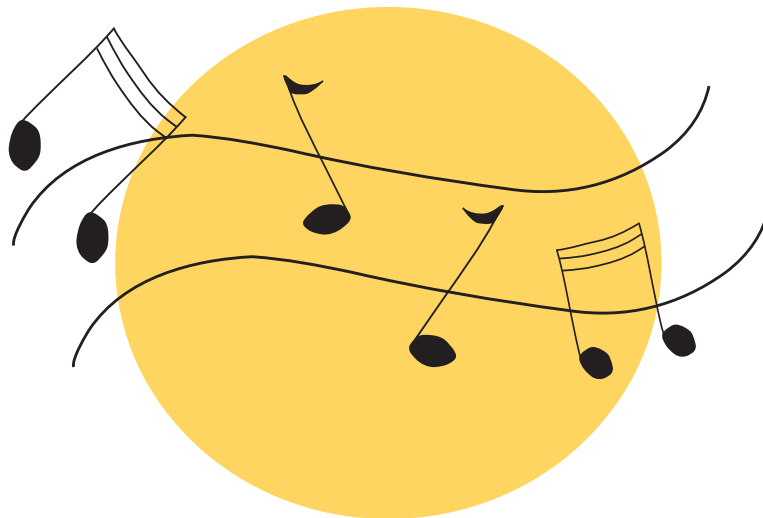


Resonator:
The amount of
vibrating air trapped
in the bottle will affect
the pitch of the note.



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- For band members who are D/deaf or hearing impaired you can focus on how the instruments feel, especially with the instruments using elastic bands. See if you can make nice vibrations with them to feel.
- You can also make vibrations using your voice. Try putting the back of someone's hand under your chin as you make a humming sound!
- Click Piece: Try to play all together only using the shortest sounds you can manage.
- Long Piece: Then try to play together using only long sounds.
- Sound Story: map out the words of a familiar story onto your instruments. Can you play the rhythms of the words?
- Soundtrack: can you make a soundtrack to your favourite book, film or tv show with your instruments?



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ideas for sound sources



Rubber bands



Old pens



Wooden spoons

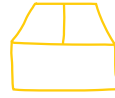


Rulers (springs)



Biro tops (whistles)

ideas for resonators



Cardboard boxes



Rolled up paper cone



Plastic, like food containers



Folders



Cardboard tubes

experiment challenges

- You can blindfold someone in your family to play a sound game, where they guess which instrument is being played.
- It's interesting to explore putting the sound close and quiet to the person's ear, move it all around their head slowly, and then get louder as you get further away. You could call this a 'sound bath' as if you do this very sensitively, it can make someone feel really relaxed.
- You could try playing the instruments in a band together where you are all blindfolded or have your eyes shut, so you only using your ears to guide you, and really listen to each other to see how it changes it.



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