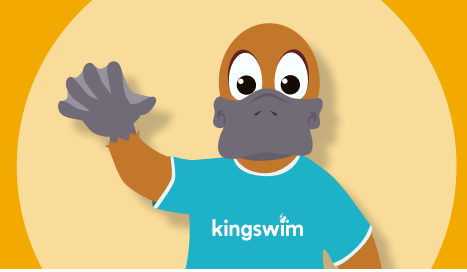


ACTIVITY SHEET: WATER XYLOPHONE



BEGINNER - Have fun at home with this DIY experiment where water, science and music come together!

What you need:

- Water
- 6 to 8 identical glasses or jars
- Measuring cups
- Kitchen utensil e.g. wooden or plastic spoon

How to make it:

- 1 Line up the glasses in a straight line on a solid surface.
- 2 Leave the first glass empty.
- 3 In the next glass, measure and fill with 1/4 cup of water.
- 4 Increase the amount of water in each of the following glasses by 1/4 cup at a time. E.g. In the second glass place 1/2 cup of water, in the third glass place 3/4 cup of water, in the fourth glass place 1 cup of water.
Tip - Add different coloured food dye or glitter in each glass for a fun rainbow twist!

You now have a water xylophone! Use your kitchen utensil to tap gently on each glass.

Investigate what you hear! Talk about why you think each one sounds different. Can you make a song or play a tune you know?



How does it work?

When your kitchen utensil gently taps on the glass, the water inside vibrates. The amount of water in the glass will change the speed of the vibrations. The more water in the glass, the more it slows down the vibrations creating a lower pitch. If there is no water in the glass, there is nothing in the way of the vibrations, allowing them to move quickly through the air into our ears. This creates the highest sound in the water xylophone.