Can You Make an Instrument?

There are hundreds of types of musical instruments that all make unique vibrations when they are plucked, blown or hit. Instruments can be made from metal, wood and even animal skins. Some musicians create sounds using everyday materials – including junk!

Performers in the show *STOMP* create sounds using brooms and dustbin lids.

Accordion

French horn

Panpipes

Tambourine

Balalaika

As a musician plays, they adjust an instrument's **volume** and **pitch**.

The volume is the **loudness** of a sound. The pitch is how **high** or **low** the sound is.

Guitar

Pitch
Long or thick strings create a low pitch. Short or thin strings create a high pitch. A musician can shorten the string on a guitar by pressing down hard on the string. This stops the vibrations travelling along the length of the string. When the shorter string is then plucked or strummed, it makes a higher-pitched sound.

Volume
The stronger a guitar or other stringed instrument is plucked or strummed, the louder the volume will be. When less force is used, the volume will be quieter.

Mbira

Pitch
The thickness of each metal tongue on this mbira is the same. The pitch is controlled by the length of the tongues. The longer the tongue, the lower the pitch. The shorter the tongue, the higher the pitch.

Volume
When the mbira is plucked with a strong force, it makes a louder sound. When less force is used, the volume is quieter.

Steel Pans

Pitch
The larger the dent in the steel pans, the lower the pitch. The smaller the dent, the higher the pitch. The pitch of a steel drum can also be affected by how deep the dents are, the shapes of the dents and their positions on the drum.

Volume
When the steel drum is hit with a stronger force it makes a louder sound. When it is hit with less force, the sound is quieter.

Make an Instrument

Have a go at designing and making a musical instrument that can play at different volumes and pitches.

Materials:

- Rubber bands of different sizes and thickness
- Junk modelling materials including: cardboard boxes, plastic containers and paper towel tubes

My Design

I will control the pitch and volume of my instrument by .....

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My instrument was successful because .....

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If I were to make this instrument again, I would change .....

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