

## Challenge

### **Using the traditional instruments of Gabon as a stimulus, design and create your own instrument.**

Working as part of a design team, discuss what will make your instrument successful. You may want to consider:

- It should produce sound
- The pitch of the instrument can be varied in some way
- Suitable materials that could be used
- Use decorative techniques and patterns to complete the instrument

The design process should involve:

- Designing your instrument and including measurements
- Constructing your instrument using an agreed range of materials
- Using a traditional pattern as a stimulus when decorating your instrument
- Deciding how the instrument could be played as part of a performance

To evaluate how effective your design is, consider the following questions:

- Does it fulfil the success criteria?
- Can it be played successfully?
- How does it resemble Gabonese instruments?
- Can the pitch of the instrument be changed?
- Could it be improved in any way?

After peer and self assessment, pupils should have the opportunity to reflect and suggest improvements to their instrument/performance.

## Resources

[Understanding sound and vibrations](#): This BBC Class Clips video explains that sounds are produced by vibrations. You can feel these when you put your fingers against your throat and talk.

[Producing sounds and pitches](#): This BBC Class Clips video is an investigation into the production of sounds and pitches, experimenting with a piece of string and some weights.

[Frequency and pitch](#): This BBC Class Clips video investigates sound and pitch.

[Instrument families](#): This website groups instruments together and also allows you to listen to the sounds they make.

[Using everyday objects as musical instruments](#): This BBC Class Clips video demonstrates how everyday items can be used to make music.

[Musical instruments from junk](#): This YouTube clip demonstrates how to make a string instrument from junk.

[Tuning junk instruments](#): In this BBC Class Clips video the leader of the junk band Echo City gives a demonstration of a junk instrument made from gas pipes - the bat phone.

[How do musical instruments work?](#) (Glow log in required): This Glow Science video explores how different instruments can produce a wide variety of different sounds and notes, but why is this? Revealing how scientific principles combine to make music.