How do musical instruments make sound?

You will:
- use your senses to investigate different ways instruments are played
- identify the part/s of an instrument that vibrate when producing sound
- explore ways to change the sound produced by instruments
- sort instruments into groups based on what vibrates,
- create a grouping criteria to sort instruments based on the action used to play the instrument or the sound produced by the instrument
- explain the decisions you made to group the instruments.
# Section 1. Investigating unusual instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>How do you think this instrument makes sound?</th>
<th>Which part of the instrument vibrates?</th>
<th>What type of sound will it make?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hammerophones</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground gong</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How do you think this instrument makes sound?

Which part of the instrument vibrates?

What type of sound will it make?
Section 2: Investigating sounds

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw a labelled diagram of the instrument you are investigating:</td>
<td></td>
</tr>
<tr>
<td>Describe the action/s used to play the instrument:</td>
<td></td>
</tr>
<tr>
<td>Describe the sounds produced by the instrument:</td>
<td></td>
</tr>
<tr>
<td>Which part of the instrument vibrates to produce sound?</td>
<td></td>
</tr>
<tr>
<td>How did you change the sound produced by the instrument?</td>
<td></td>
</tr>
<tr>
<td>What part of the body senses the sounds?</td>
<td></td>
</tr>
</tbody>
</table>
Section 3: Grouping sounds

<table>
<thead>
<tr>
<th>membranophone</th>
<th>idiophone</th>
</tr>
</thead>
<tbody>
<tr>
<td>aerophone</td>
<td>chordophone</td>
</tr>
</tbody>
</table>
Section 4: Creating your own grouping criteria
# How do musical instruments make sound?

<table>
<thead>
<tr>
<th>Assessment description</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children investigate how musical instruments make sound. They record their observations and discuss their findings.</td>
<td>Spoken and/or written</td>
</tr>
</tbody>
</table>

### Context for assessment

In this assessment children investigate the production of sound and develop an understanding of how sound can be altered.

They will have the opportunity to participate in a guided investigation to compare:

- sounds made by musical instruments
- the source of the sounds
- the actions used to make the sounds
- characteristics such as loudness and pitch.

### Australian Curriculum v6.0, Year 1 Science

Australian Curriculum content and achievement standard ACARA — Australian Curriculum, Assessment and Reporting Authority: www.australiancurriculum.edu.au

Year 1 Science standard elaborations available at: www.qcaa.qld.edu.au/yr1-science-resources.html

### Connections

This assessment can be used with the QCAA Australian Curriculum resource titled *Year 1 Science Year plan* available at: www.qcaa.qld.edu.au/yr1-science-resources.html

### Definitions

- **Idiophones**: instruments that produce sound by the instrument as a whole vibrating, e.g. xylophones
- **Membranophones**: instruments that produce sound by a vibrating membrane, e.g. drums
- **Chordophones**: instruments that produce sound by vibrating strings, e.g. harps
- **Aerophones**: instruments that produce sound by vibrating air, e.g. pipes

### In this assessment

Teacher guidelines
Task-specific standards — continua
Task-specific standards — matrix
Teacher presentation (PowerPoint)
Assessment resource: Unusual musical instruments
Assessment resource: Example of a grouping
Assessment resource: Word walls
Student booklet

### Assessment materials

A range of musical instruments
Photos of unusual musical instruments
Other possible resources: pencils, camera, computers, iPads
Teacher guidelines

Identify curriculum

### Content descriptions to be taught

<table>
<thead>
<tr>
<th>Science Understanding</th>
<th>Science as a Human Endeavour</th>
<th>Science Inquiry Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical sciences</strong></td>
<td><strong>Nature and development of science</strong></td>
<td><strong>Processing and analysing data and information</strong></td>
</tr>
<tr>
<td>• Light and sound are produced by a range of sources and can be sensed <strong>ACSSU020</strong></td>
<td>• Science involves asking questions about, and describing changes in, objects and events <strong>ACSHE021</strong></td>
<td>• Use a range of methods to sort information, including drawings and provided tables <strong>ACSIS027</strong></td>
</tr>
</tbody>
</table>

### General capabilities (GCs) and cross-curriculum priorities (CCPs)

This assessment may provide opportunities to engage with the following GCs and CCPs. Refer also to the Resources tab on the Year 1 Science curriculum and assessment page: [www.qcaa.qld.edu.au/yr1-science-resources.html](http://www.qcaa.qld.edu.au/yr1-science-resources.html)

- 📚 Literacy
- 📏 Numeracy
- 📊 ICT capability
- 💡 Critical and creative thinking
- 🇦🇺 🇸🇬 Aboriginal and Torres Strait Islander histories and cultures

### Achievement standard

This assessment provides opportunities for children to demonstrate the following highlighted aspects.

By the end of Year 1, students describe objects and events that they encounter in their everyday lives, and the effects of interacting with materials and objects. They identify a range of habitats. They describe changes to things in their local environment and suggest how science helps people care for environments. Students make predictions, and investigate everyday phenomena. They follow instructions to record and sort their observations and share their observations with others.

Sequence learning

Suggested learning experiences

This assessment leads on from the learning experiences outlined in the QCAA Year 1 Science year plan. The knowledge, understanding and skills developed in the exemplar unit will prepare children to engage in this assessment:

• See unit overview — Year 1 Science exemplar (Light and sound)
  www.qcaa.qld.edu.au/yr1-science-resources.html

Adjustments for needs of learners

To make adjustments, teachers refer to learning area content aligned to the child's chronological age, personalise learning by emphasising alternate levels of content, general capabilities or cross-curriculum priorities in relation to the chronological age learning area content. The emphasis placed on each area is informed by the child’s current level of learning and their strengths, goals and interests. Advice on the process of curriculum adjustment for all children and in particular for those with disability, gifted and talented or for whom English is an additional language or dialect are addressed in Australian Curriculum — Student Diversity materials.

For information to support children with diverse learning needs, see:

• Queensland Curriculum and Assessment Authority materials for supporting children with diverse learning needs
  www.qcaa.qld.edu.au/10188.html

• Australian Curriculum Student Diversity
  www.australiancurriculum.edu.au/StudentDiversity/Student-diversity-advice

• The Melbourne Declaration on Educational Goals for Young Australians

• The Disability Standards for Education www.ag.gov.au.

Resources

Follow the formats suggested below for each type of resource.

Online

• Explanation and diagrams of the ear and how it works
  http://kidshealth.org/kid/htbw/ears.html

• BBC website — KS2 Bitesize — Interactive website on sounds
  www.bbc.co.uk/schools/ks2bitesize/science/physical_processes/changing_sounds/read1.shtml

• Hands-on activities relating to sound
  www.smm.org/sound/nocss/activity/handson.htm

• The Aboriginal Art Online website gives information about traditional Aboriginal instruments, including boomerang clapsticks, percussion sticks, hollow log drums, seed rattles and the didgeridoo
  www.aboriginalartonline.com/culture/amusic2.php

• How to make your own balloon drum
  www.balloondrums.com/howtomakeyourown.html

• Look! Listen!, a PrimaryConnections curriculum resource that explores light and sound:
# Develop assessment

## Preparing for the assessment

Learning experiences in preparation for the assessment could include:

**Develop subject-specific vocabulary**
- Use words that relate to instruments and sound.
- Define the categories of instruments: idiophones, membranophones, chordophones and aerophones.
- Make a word wall or picture glossary (see Assessment resource — *Word walls*).
- Continue to add to word bank throughout the unit/assessment.

**Explore and make observations about sound**
- Recognise that the senses of sight, touch and hearing are used to learn about sound in the world around us.
- Explore ways to create sounds using different actions: blowing, shaking, scraping, striking, plucking etc.
- Create sounds using a wide variety of everyday objects and instruments.
- Identify sound production of instruments and sort into tables to categorize.
- Sort objects and instruments according to how the sound was made.
- Link what has been learnt about how sound is produced to how the ear works.

**Investigate ways to change the quality of sound**
- Participate in guided investigations to compare sounds made by musical instruments using characteristics such as loudness, pitch and actions used to make the sound.
- Experiment with changing materials in order to change the pitch and volume of sound, e.g. water levels in bottles, size of rubber bands, length of straws, etc.
- Discuss how the characteristics of sound are used in everyday things.

**Represent what they see using scientific diagrams**
- Discuss and model the difference between a scientific diagram (what you see) and drawing to express an idea (art).
- Practise recording (drawing/labelling/writing) observations.
- Practise sorting things using a grouping table.
- Reflect as a class on observations.
- Support children to communicate ideas and explain the grouping decisions they make.
Implementing

**Strategies for collecting evidence could include:**
- scribing for children who require assistance
- recording conversations on, for example, iPad, iPhone, voice recorder
- making observations

### Section 1. Investigating unusual instruments

<table>
<thead>
<tr>
<th>Child role</th>
<th>Teacher role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As a class:</strong></td>
<td><strong>Use the presentation (PowerPoint) to guide the children through the assessment and set the backdrop for each part of the investigation.</strong></td>
</tr>
<tr>
<td>- participate in a discussion about unusual musical instruments, or images of them and brainstorm ideas about:</td>
<td><strong>Select a range of unusual instruments for children to use in small groups or use the Assessment resource — Unusual musical instruments (or use PowerPoint slides 6–8) as stimulus for class discussion.</strong></td>
</tr>
<tr>
<td>- how the instruments might make sound</td>
<td><strong>Use the learning anchor for Section 1 (PowerPoint slide 3).</strong></td>
</tr>
<tr>
<td>- which part of the instrument vibrates</td>
<td><strong>Share Assessment resource — Word walls (PowerPoint slides 4 and 5).</strong></td>
</tr>
<tr>
<td>- what type of sound the instruments might make</td>
<td><strong>Facilitate the class discussion to answer, for each unusual instrument, the questions:</strong></td>
</tr>
<tr>
<td>- participate in a class discussion to share and compare observations.</td>
<td>- how do you think the instrument might make sound?</td>
</tr>
<tr>
<td></td>
<td>- which part of the instrument might vibrate?</td>
</tr>
<tr>
<td></td>
<td>- what type of sound will it make?</td>
</tr>
<tr>
<td></td>
<td><strong>Collaborate with the children to record their responses to the questions in the Student booklet using written/drawn representations. Where appropriate scribe for children who require assistance.</strong></td>
</tr>
</tbody>
</table>
Section 2. Investigating sounds

Child role
In a group:
- when playing with a range of musical instruments:
  - use senses to explore different ways to play instruments.
  - describe the sounds produced by the instruments.
  - use senses to identify which part of each instrument vibrates.
  - explore ways to change the sound of instruments.
  - explain how the sound gets to your ears.
- choose one instrument and follow the teacher’s prompts to investigate that instrument in detail with the members of the group.
- participate in a class discussion to share and compare observations.

Individually:
- collaborate with the teacher to discuss the prompts on the learning anchor for the chosen instrument.

Teacher role
- Provide:
  - a range of musical instruments
  - the learning anchor for Section 2 (PowerPoint slide 10)
  - Assessment resource — Word walls (PowerPoint slides 11 and 12).
  - Use your knowledge of the children’s personalities and abilities to place children in groups.
  - Discuss and demonstrate the learning anchor.
  - Guide children to complete Section 2, monitoring them playing freely with the instruments and then choosing one instrument to follow the process on the learning anchor.
- Look for evidence of children:
  - identifying how instruments are played
  - touching, looking at and listening to instruments to identify what vibrates
  - posing and responding to questions about sound and exploring ways to change sound, e.g. What will happen if … is changed?
  - identifying instruments that make similar sounds
  - talking to others about the sounds they hear or make
  - explaining how sound is produced
- Facilitate the class discussion so children share and compare their observations and explanations.
- Collaborate with the children to record their responses to the learning anchor statements for the chosen instrument in the Student Booklet. Where appropriate scribe for children who require assistance.

Section 3. Grouping sounds

Child role
Individually:
- sort the instruments according to how they vibrate using the sorting criteria provided by the teacher for:
  - idiophones
  - membranophones
  - chordophones
  - aerophones
- record groupings in the categorising table in the Student booklet by drawing the instruments and/or writing their names in the table
- share ideas about how to group the instruments with the teacher and class
- use the evidence from your observations to explain your grouping decisions.

Teacher role
- Provide:
  - the range of musical instruments used in Section 2 of the investigation
  - the learning anchor for Section 3 (PowerPoint slide 14)
  - Assessment resource — Word walls (PowerPoint slides 15)
  - Assessment Resource — Example of a grouping table (and/or PowerPoint slide 16)
- Model how to create and complete the grouping table.
- Look for evidence of children:
  - sorting instruments into the correct groups, e.g. harps into the chordophone group
  - using the table to show groupings
  - explaining their grouping decisions
  - using appropriate scientific language.
- Direct children to record responses in Student booklet, where appropriate scribe for children who require assistance.
- Facilitate the class discussion so children share and compare their groupings and explanations for the decisions they made.
Section 4. Creating your own grouping criteria

<table>
<thead>
<tr>
<th>Child role</th>
<th>Teacher role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individually:</td>
<td>• Provide:</td>
</tr>
<tr>
<td>• think about your words to:</td>
<td>– the range of musical instruments used in Sections 2 and 3 of the investigation</td>
</tr>
<tr>
<td>– identify the action used to play the instruments (Section 2)</td>
<td>– the learning anchor for Section 4 (PowerPoint slide 18)</td>
</tr>
<tr>
<td>– describe the sound produced by the instruments (Section 2).</td>
<td>– Assessment resource — Word walls (PowerPoint slides 19 and 20).</td>
</tr>
<tr>
<td>• identify similar words, odd-one-out and opposites</td>
<td>• With reference to the word walls model how to sort the instruments using either the:</td>
</tr>
<tr>
<td>• use either actions to play or sounds produced to create a way to group the instruments based on what you have noticed based on similarities</td>
<td>– action used to play the instruments</td>
</tr>
<tr>
<td>• create a grouping table in the Student booklet and record the groupings by drawing the instruments and writing their names</td>
<td>– sound produced by the instruments.</td>
</tr>
<tr>
<td>• share ideas about how you grouped the instruments with the teacher and class</td>
<td>• Model the creation of the grouping table.</td>
</tr>
<tr>
<td>• use the evidence from your observations to explain your grouping decisions.</td>
<td>• Support children to sort and create the grouping table for the option not modelled.</td>
</tr>
</tbody>
</table>

Make judgments

When making judgments about the evidence in children’s responses to this assessment, teachers are advised to use the task-specific standards provided. The development of these task-specific standards has been informed by the Queensland Year 1 Science standard elaborations. See www.qca.qld.edu.au/downloads/p_10/ac_sci_yr1_se.doc

The Queensland standard elaborations for Year 1 Science

The Queensland Year 1 standard elaborations for Science are a resource to assist teachers to make consistent and comparable evidence-based A to E (or the Early Years equivalent) judgments. They should be used in conjunction with the Australian Curriculum achievement standard and content descriptions for the relevant year level.

The Queensland Science standard elaborations provide a basis for judging how well children have demonstrated what they know, understand and can do using the Australian Curriculum achievement standard.

The Australian Curriculum achievement standards dimensions of Understanding and Skills are used to organise the Queensland Science standard elaborations.

The valued features of Science, drawn from the achievement standard and the content descriptions for the Understanding dimension and the Skills dimension, are organised as:
• Science Understanding
• Science as a Human Endeavour
• Questioning and predicting
• Planning and conducting, processing and analysing data and information
• Evaluating and communicating.

Task-specific standards
Task-specific standards give teachers:
• a tool for directly matching the evidence of learning in the response to the standards
• a focal point for discussing children’s responses
• a tool to help provide feedback to children.

Task-specific standards are not a checklist; rather they are a guide that:
• highlights the valued features that are being targeted in the assessment and the qualities that will inform the overall judgment
• specifies particular targeted aspects of the curriculum content and achievement standard
• aligns the valued feature, task-specific descriptor and assessment
• allows teachers to make consistent and comparable on-balance judgments about a child’s work by matching the qualities of children’s responses with the descriptors
• clarifies the curriculum expectations for learning at each of the five grades (A–E or the Early Years equivalent)
• shows the connections between what children are expected to know and do, and how their responses will be judged and the qualities that will inform the overall judgment
• supports evidence-based discussions to help children gain a better understanding of how they can critique their own responses and achievements, and identify the qualities needed to improve
• encourages and provides the basis for conversations among teachers, children and parents/carers about the quality of children’s work and curriculum expectations and related standards.

Task-specific valued features
Task-specific valued features are the discrete aspects of the valued features of Science targeted in a particular assessment and incorporated into the task-specific standards for that assessment. They are selected from the Queensland Science standard elaborations valued features drawn from the Australian Curriculum achievement standard and content descriptions.

Task-specific valued features for this assessment
The following table identifies the valued features for this assessment and makes explicit the understandings and skills that children will have the opportunity to demonstrate. This ensures that the alignment between what is taught, what is assessed and what is reported is clear.
### Understanding dimension

<table>
<thead>
<tr>
<th>Understanding dimension</th>
<th>Queensland standard elaborations valued features</th>
<th>Task-specific valued features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Understanding</td>
<td></td>
<td>Describes groupings of musical instruments based on different characteristics and explains the reasons for decisions made when creating the groupings <strong>Sections 3 and 4</strong></td>
</tr>
</tbody>
</table>

### Skills dimension

- **Planning and conducting**
- **Processing and analysing data and information**

<table>
<thead>
<tr>
<th>Planning and conducting</th>
<th>Processing and analysing data and information</th>
<th>Participates in the investigation and records and sorts observations about sound produced by different musical instruments <strong>Sections 1 and 2</strong></th>
</tr>
</thead>
</table>

- **Evaluating**
- **Communicating**

<table>
<thead>
<tr>
<th>Evaluating</th>
<th>Communicating</th>
<th>Shares observations about sound with others (using drawings and scientific terminology) <strong>Sections 1, 2, 3, 4</strong></th>
</tr>
</thead>
</table>

The task-specific standards for this assessment are provided in two models using the same task-specific valued features:

- a matrix
- a continua

**Matrix and continua**

Task-specific standards can be prepared as a matrix or continua. Both the continua and the matrix:

- use the Queensland standard elaborations to develop task-specific descriptors to convey expected qualities in children’s work — A to E (or the Early Years equivalent)
- highlight the same valued features from the Queensland standard elaborations that are being targeted in the assessment and the qualities that will inform the overall judgment
- incorporate the same task-specific valued features, i.e. make explicit the particular understanding / skills that children have the opportunity to demonstrate for each selected valued feature
- provide a tool for directly matching the evidence of learning in the child’s response to the standards to make an on-balance judgment about achievement
- assist teachers to make consistent and comparable evidence-based A to E (or the Early Years equivalent) judgments.

**Matrix**

- The matrix model of task-specific standards uses the structure of the Queensland standard elaborations to organise the task-specific valued features and standards A to E (or the Early Years equivalent). The task-specific descriptors of the standard described in the matrix model use the same degrees of quality described in the Queensland standard elaborations.
• Teachers make a judgment about the task-specific descriptor in the A to E (or the Early Years equivalent) cell of the matrix that best matches the evidence in the children’s responses in order to make an on-balance judgment about how well the pattern of evidence meets the standard.

• The matrix is a tool for making both overall on-balance judgments and analytic judgments about the assessment. Achievement in each valued feature of the Queensland standard elaboration targeted in the assessment can be recorded and feedback can be provided on the task-specific valued features.

Continua

The continua model of task-specific standards uses the dimensions of the Australian Curriculum achievement standard to organise task-specific valued features and standards as a number of reference points represented progressively along an A to E (or Early Years equivalent) continuum. The task-specific valued features at each point are described holistically. The task-specific descriptors of the standard use the relevant degrees of quality described in the Queensland standard elaborations.

Teachers determine a position along each continuum that best matches the evidence in the children’s responses to make an on-balance judgment about achievement on the task.

The continua model is a tool for making an overall on-balance judgment about the assessment and for providing feedback on task specific valued features.
### Use feedback

<table>
<thead>
<tr>
<th>Feedback to children</th>
<th>Evaluate the information gathered from the assessment to inform teaching and learning strategies. Focus feedback on the child’s personal progress and the next steps in the learning journey. Offer feedback that:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• acknowledges the knowledge and skills they are using</td>
</tr>
<tr>
<td></td>
<td>• supports children to identify areas where they need to improve</td>
</tr>
<tr>
<td></td>
<td>• maximises the children’s opportunities to succeed in the assessment by providing feedback on investigations carried out during the term. Specifically about:</td>
</tr>
<tr>
<td></td>
<td>− accurately recording and sorting accurate observations</td>
</tr>
<tr>
<td></td>
<td>− providing reasoned explanations for decisions</td>
</tr>
<tr>
<td></td>
<td>− involves children in the process by providing opportunities to ask follow-up questions</td>
</tr>
<tr>
<td></td>
<td>• encourages children to work towards improving outcomes</td>
</tr>
<tr>
<td></td>
<td>• focuses on each child’s personal progress relative to their previous achievements</td>
</tr>
<tr>
<td></td>
<td>• identifies the characteristics of a high quality response that aligns with the descriptors in the Task-specific standards.</td>
</tr>
<tr>
<td></td>
<td>The task-specific standards for this assessment can be used as a basis for providing feedback to children.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>For guidance on providing feedback, see the professional development packages titled:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• About feedback <a href="http://www.qcaa.qld.edu.au/downloads/p_10/as_feedback_about.docx">www.qcaa.qld.edu.au/downloads/p_10/as_feedback_about.docx</a></td>
</tr>
<tr>
<td></td>
<td>• Seeking and providing feedback <a href="http://www.qcaa.qld.edu.au/downloads/p_10/as_feedback_provide.docx">www.qcaa.qld.edu.au/downloads/p_10/as_feedback_provide.docx</a></td>
</tr>
</tbody>
</table>
### How do musical instruments make sound?

**Purpose of assessment:** Investigate how musical instruments make sound.

<table>
<thead>
<tr>
<th>Applying (AP)</th>
<th>Making connections (MC)</th>
<th>Working with (WW)</th>
<th>Exploring (EX)</th>
<th>Becoming aware (BA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understanding Dimension</strong></td>
<td><strong>Science Understanding</strong></td>
<td><strong>Understanding</strong></td>
<td><strong>Understanding</strong></td>
<td><strong>Understanding</strong></td>
</tr>
<tr>
<td>Sections 3 and 4</td>
<td>Describes groupings of musical instruments based on different characteristics and explains the reasons for decisions made when creating the groupings</td>
<td>Clear description and explanation for decisions made about instrument groupings, with links to science, based on:</td>
<td>Description of instrument groupings, with links to science, based on:</td>
<td>Guided description of instrument groupings based on:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• what vibrates</td>
<td>• what vibrates</td>
<td>• what vibrates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• the action to play or the sound produced</td>
<td>• the action to play or the sound produced</td>
<td>• the action to play or the sound produced</td>
</tr>
<tr>
<td><strong>Skills Dimension</strong></td>
<td><strong>Planning and conducting investigations</strong></td>
<td><strong>Processing and analysing data and information</strong></td>
<td><strong>Communicating</strong></td>
<td><strong>Evaluating</strong></td>
</tr>
<tr>
<td>Sections 1 and 2</td>
<td>Participates in the investigation and records and sorts observations about sound produced by different musical instruments</td>
<td>Investigation of sound and following of instructions to record and sort linked observations about:</td>
<td>Investigation of sound and following of instructions to record and sort observations about:</td>
<td>Guided investigation of sound and guided recording and sorting of observations about:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• actions that produce sound</td>
<td>• actions that produce sound</td>
<td>• actions that produce sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• sound produced</td>
<td>• sound produced</td>
<td>• sound produced</td>
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<tr>
<td></td>
<td></td>
<td>• what vibrates to produce sound</td>
<td>• what vibrates to produce sound</td>
<td>• what vibrates to produce sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• how to change sound</td>
<td>• how to change sound</td>
<td>• how to change sound</td>
</tr>
<tr>
<td>Sections 1, 2, 3 and 4</td>
<td>Shares observations with others using clear representations and relevant scientific terminology about:</td>
<td>Sharing of observations with others using clear representations and linked scientific terminology about:</td>
<td>Sharing of observations with others about:</td>
<td>Guided sharing of observations with others about:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• the ways instruments make sound</td>
<td>• the ways instruments make sound</td>
<td>• the ways instruments make sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• types of sound</td>
<td>• types of sound</td>
<td>• types of sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• how sound can be changed</td>
<td>• how sound can be changed</td>
<td>• how sound can be changed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• how instruments can be grouped</td>
<td>• how instruments can be grouped</td>
<td>• how instruments can be grouped</td>
</tr>
<tr>
<td><strong>Name</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Purpose of assessment: Investigate how musical instruments make sound.

<table>
<thead>
<tr>
<th>Understanding dimension</th>
<th>Skills dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Science Understanding</strong></td>
<td><strong>• Planning and conducting</strong></td>
</tr>
<tr>
<td><strong>Sections 3 and 4</strong></td>
<td><strong>• Processing and analysing data and information</strong></td>
</tr>
<tr>
<td>Describes groupings of musical instruments based on different characteristics and explains the reasons for decisions made when creating the groupings</td>
<td><strong>• Evaluating</strong></td>
</tr>
<tr>
<td><strong>Sections 1 and 2</strong></td>
<td><strong>• Communicating</strong></td>
</tr>
<tr>
<td>Participates in the investigation and records and sorts observations about sound produced by different musical instruments</td>
<td></td>
</tr>
<tr>
<td><strong>Sections 1, 2, 3 and 4</strong></td>
<td></td>
</tr>
<tr>
<td>Shares observations about sound with others (including use of using drawings and scientific terminology)</td>
<td></td>
</tr>
</tbody>
</table>

- **Clear description and explanation for decisions made about instrument groupings, with links to science, based on:**
  - what vibrates
  - the action to play or the sound produced

- **Description of instrument groupings based on:**
  - what vibrates
  - the action to play or the sound produced

- **Directed statements about instrument groupings based on:**
  - what vibrates
  - the action to play or the sound produced

- **Investigation of sound and following of instructions to record and sort accurate observations about:**
  - actions that produce sound
  - sound produced
  - what vibrates to produce sound
  - how to change sound

- **Directed investigation of sound and directed recording and sorting of observations about:**
  - actions that produce sound
  - sound produced
  - what vibrates to produce sound
  - how to change sound

- **Sharing of observations with others using clear representations and relevant scientific terminology about:**
  - the ways instruments make sound
  - types of sound
  - how sound can be changed
  - how instruments can be grouped

- **Sharing of observations with others about:**
  - the ways instruments make sound
  - types of sound
  - how sound can be changed
  - how instruments can be grouped

- **Directed sharing of observations with others about:**
  - the ways instruments make sound
  - types of sound
  - how sound can be changed
  - how instruments can be grouped

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How do musical instruments make sound?

Unusual musical instruments
How do musical instruments make sound?
How do musical instruments make sound?

Word walls
Playing instruments action words

- blow
- shake
- strike
- bang
- scrape
- hit
- strum
- pluck
### Describing sound words

<table>
<thead>
<tr>
<th>deep</th>
<th>high</th>
<th>loud</th>
<th>soft</th>
</tr>
</thead>
<tbody>
<tr>
<td>rattle</td>
<td>sharp</td>
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<td>long</td>
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<tr>
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<td>smash</td>
<td>boom</td>
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<td>hoot</td>
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<td>jingle</td>
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<tr>
<td>clash</td>
<td>screech</td>
<td>low</td>
<td>scratchy</td>
</tr>
</tbody>
</table>
## Sound grouping words

<table>
<thead>
<tr>
<th>aerophone</th>
<th>idiophone</th>
</tr>
</thead>
<tbody>
<tr>
<td>membranophone</td>
<td>chordophone</td>
</tr>
</tbody>
</table>
How do musical instruments make sound?

Year 1 Australian Curriculum: Science
Section 1: Investigating unusual instruments
Section 1: Learning anchor

We will look at some unusual instruments and:
• investigate ways the instruments make sound
• use the word wall to describe the action used to play the instruments
• identify which parts of the instrument vibrate
• use the word wall to describe the sound produced by the instruments.
Playing instruments action words

- blow
- shake
- strike
- bang
- scrape
- hit
- strum
- pluck
<table>
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</table>
How do you think this instrument makes sound?

Which part of the instrument vibrates?

What type of sound will it make?
How do you think this instrument makes sound?

Which part of the instrument vibrates?

What type of sound will it make?
How do you think this instrument makes sound?

Which part of the instrument vibrates?
What type of sound will it make?
Section 2: Investigating sounds
Section 2: Learning anchor

We will play with musical instruments and:

• use the word wall to describe the action/s used to play the instruments
• use the word wall to describe the sounds produced by the instruments
• use our senses to identify which parts of the instruments vibrate
• explore ways to change the sound produced by the instruments
• explain how our ears hear the sound.
Playing instruments action words

- blow
- shake
- strike
- bang
- scrape
- hit
- strum
- pluck
## Describing sound words

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</table>
Section 3: Grouping sounds
Section 3: Learning anchor

We will:

• complete a grouping table to sort the instruments based on what vibrates to produce sound
• use the word wall to name the groupings
• explain how we grouped the instruments.
## Sound grouping words

<table>
<thead>
<tr>
<th>Membranophone</th>
<th>Idiophone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerophone</td>
<td>Chordophone</td>
</tr>
</tbody>
</table>

- **Membranophone**
  - Membranophone

- **Idiophone**
  - Idiophone

- **Aerophone**
  - Aerophone

- **Chordophone**
  - Chordophone
Example of a grouping table

<table>
<thead>
<tr>
<th>membranophone</th>
<th>idiophone</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="membranophone" /></td>
<td><img src="image2.png" alt="idiophone" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>aerophone</th>
<th>chordophone</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="aerophone" /></td>
<td><img src="image4.png" alt="chordophone" /></td>
</tr>
</tbody>
</table>
Section 4:
Creating your own grouping criteria
Section 4: Learning anchor

We will:

• think about the words we used to:
  - identify the action used to play the instruments
  - describe the sound produced by the instruments

• create a grouping table to sort instruments based on

• explain how we grouped the instruments.
Playing instruments action words

- blow
- shake
- strike
- bang
- scrape
- hit
- strum
- pluck
## Describing sound words

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How do musical instruments make sound?

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<tr>
<td>Aerophone</td>
<td>Chordophone</td>
</tr>
<tr>
<td><img src="image3" alt="Aerophone" /></td>
<td><img src="image4" alt="Chordophone" /></td>
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</table>

How do musical instruments make sound?