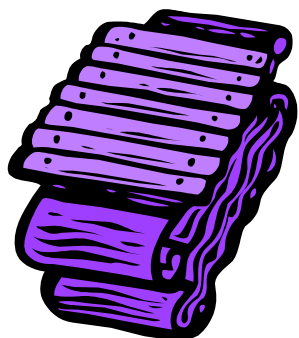


Gamelan



Scheme of Work
Teacher notes
Pupil Worksheets
Computer based task



Teacher notes

An introduction

Suitable instruments

For this scheme you don't need a real Gamelan! A range of pitched instruments will do, especially glockenspiels, xylophones, metallophones, and keyboards. For unpitched percussion, hand percussion such as congas or bongos will be fine. Ideally a gong of some kind should be used.

Keyboards

Many keyboards now use General MIDI voices. Here are some suitable ones :

MARIMBA
XYLOPHONE
TUBULAR BELL
MUSIC BOX
GLOCKENSPIEL

Authenticity

The vast majority of schools do not have Gamelan instruments. This scheme therefore has been adapted to make use of instruments that resemble those used in the Gamelan and that may be easily available in schools.

The pitch of the notes used in Gamelan varies from orchestra to orchestra, but the *Slendro* tuning closely resembles the notes E F G B C used in this scheme.

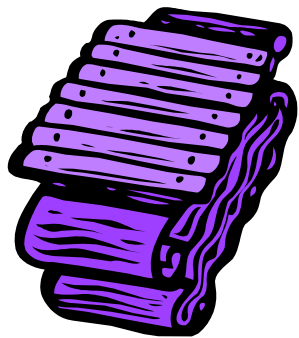
The notes in this scheme are each given a corresponding number as follows:

E	F	G	B	C
1	2	3	5	6

In the authentic Gamelan *Slendro*, the notes on instruments are ordered as follows :

6 1 2 3 5 6 1

There are therefore a low and high octave of notes 6 and 1



Teacher notes

An introduction

Preparing the instruments

Gamelan instruments only have the notes needed to play the music. The instruments in the classroom probably have all 12 notes of the Western scale, so modifications are needed!

If possible, remove the bars not needed on glockenspiels etc, otherwise label the notes with masking tape.

In this scheme, we have tried to recreate the essential ingredients of the Gamelan. These are :

Melody

usually played on the Saron, a type of metallophone

Peking

This is a higher pitched metallophone that plays the melody in doubled notes.

Bonang

This is a lower pitched instrument, resembling upturned pots and pans which plays off beats.

Gongs

These are tuned and play a bass part not necessarily on every beat, but the 1st beat is usually the lowest note (note 1). The largest gong is called the *Gong Ageng*

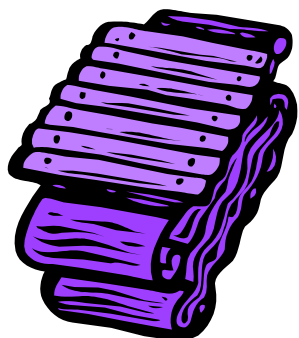
Percussion

Any small hand percussion will be fine. In traditional Gamelan, hand drums are played to keep the ensemble in time and to dictate accels and ralls (speeding up and slowing down)

Internet resources for Gamelan

There are some excellent sites to support this scheme, including a Virtual gamelan that can be played with the computer keyboard.

<http://www.monkeyc.org/play.html>



Teacher notes

Lesson 1

Introduction to Gamelan Music

Explain that the class are going to learn about music from Java and Bali, 2 islands in Indonesia. It helps if you have a map of the world to refer to at this point.

The music from Bali and Java is called Gamelan, and uses gongs, xylophone and metallophone type instruments and other instruments that look like upturned pots and pans.

The Gamelan musicians always take their shoes off when playing a Gamelan, because the instruments are always shown respect. In Indonesia, they believe there are invisible threads that start at the instrument go to heaven, carrying the music with them.

When a Gamelan player dies, his instrument is never played again. There are about 20 players in a Gamelan.

Gamelan music is played in concerts, royal courts, in the villages, accompanying singers, at weddings and is also played in puppet shows. Puppet shows are very popular in Indonesia and can last many hours, sometimes all night!

Introductory rhythm games

Gamelan music works in cycles of 8 beats. One note is played on each beat. Here are a few games to introduce this.

Stand in a circle.

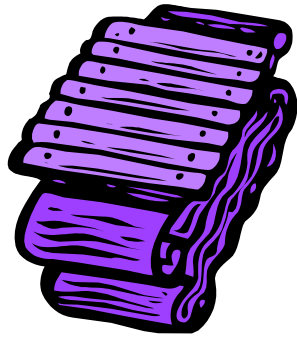
- Everyone claps on 1st beat together.
- Everyone claps on 1st and 5th beats
- Boys clap on 1st & 5th, Girls on 3rd and 7th Develop this as you like.

Games using instruments

Gamelan music uses numbers representing notes, like this :

E	F	G	B	C
1	2	3	5	6

Depending on what instruments are available, divide up the class so that each instrument is playing one note on a different beat. For example :



Teacher notes

Lesson 1

	1	2	3	4	5	6	7	8
Glock	E							
Xylo			B					
Tub bell							C	
Marimba								F

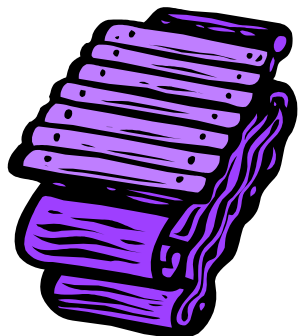
A suitable rhythm to accompany this would be :

The musical notation shows three staves. The Claves staff has a steady quarter-note rhythm. The Conga/Bongos staff has a more complex pattern with eighth and quarter notes. The Cabasa/Afuche staff has a steady eighth-note rhythm.

Rotate pupils on the percussion so that everybody in the class has eventually played a percussion instrument and a melody instrument.

- Play this at a slow speed (70 Beats per minute approx)
- Make sure pupils are precise and listen to each other

Now make the same exercise more complex by asking them to play two notes on any two beats. Here is an example :



Teacher notes

Lesson 1

	1	2	3	4	5	6	7	8
Glock	E		G					
Xylo		C			B			
Tub bell		F					E	
Marimba				C				G

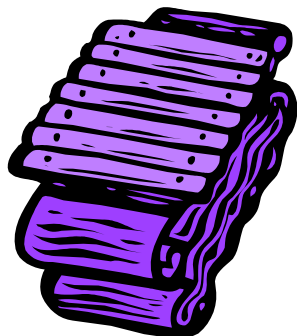
Play this again with the percussion accompaniment.

The next logical step is to ask the pupils to play any of the notes E F G B C on any 3 beats they choose. Since this scale closely resembles the pentatonic scale, the harmony works well.

Discussion

Ask questions about the Gamelan such as :

- Where is Indonesia?
- What are the two main islands where Gamelan is played?
- In what ways do Indonesian musicians show respect for the Gamelan?
- What notes are used in the Gamelan?
- What types of instruments are used in the Gamelan?
- What have they learned in this lesson?



Teacher notes

Lesson 2

Introduction

Ask pupils what they remember about the Gamelan from last week and recap on the 8 beat pattern and notes used in the Gamelan.

Singing a Gamelan tune

Now they are going to learn a traditional Balinese tune called Gamelan Sem. It is best to do this by singing the tune first using the note numbers. Each note is the same length. Play or sing it slowly to start with.

Gamelan Sem : 1st phrase

Note number (SING THIS)	1	2	3	5	3	5	3	2
Note	E	F	G	B	G	B	G	F

Next, try playing the phrase.

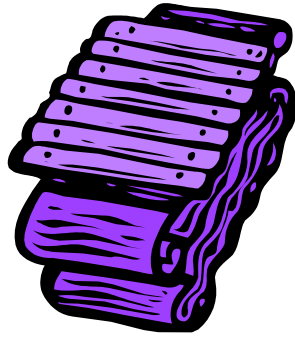
Allow some time for the pupils to learn this thoroughly so they can play it together.

Now learn the 2nd phrase by singing it first, then playing it as before.

Gamelan Sem : 2nd phrase

Note number (SING THIS)	6	6	5	3	5	3	2	1
Note	C	C	B	G	B	G	F	E

These phrases are printed on Pupil Worksheet 1



Teacher notes

Lesson 2

Putting the phrases together

Gamelan Sem

Phrase 1 (x3)

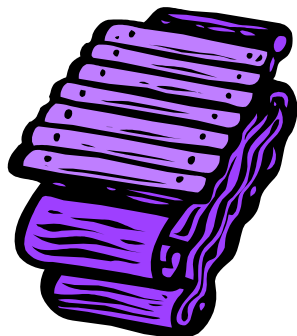
Phrase 2 (x1)

Repeat this as much as you like!

Discussion session

Ask the pupils some questions about the music they have just performed.

- How is this music different to the music and songs we normally perform
- How did it feel to play this type of music?
- Was the music happy, sad, hypnotic?



Teacher notes

Lesson 3

Introduction

Recap on the tune learned in the last lesson *Gamelan Sem*. This is printed on Pupil Worksheet 1.

Ask the pupils what they can remember about the Gamelan from last week.

Adding more parts to *Gamelan Sem*

In traditional Gamelan, the *Peking* plays each note of the tune twice (equivalent to quavers / 8th notes). The *Peking* is a small metallophone, so this can be played on the higher octave of a glockenspiel or keyboard.

The *bonang* are lower pitched instruments, looking a little like upturned pots and pans. This usually plays off the beat.

Bonang : Phrase 1 and Phrase 2
Remember to play OFF THE BEAT

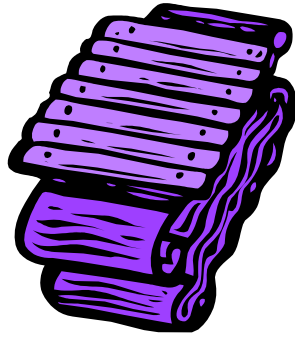
Note number	1	2	3	3	4	4	3	3
Note	E	E	G	G	B	B	G	G

The Gongs

Gongs do not play on every beat, so it is important to count carefully. The sound can be reproduced using a keyboard (tubular bell sound), tubular bell or even tuned timpani if you have any.

Gong : Phrases 1 & 2

Count	1	2	3	4	5	6	7	8
Note number	1				3			6
Note	E				G			C



Teacher notes

Lesson 3

Divide the class up so that the majority are playing the main melody and a few other pupils are playing the peking, bonang and gong parts.

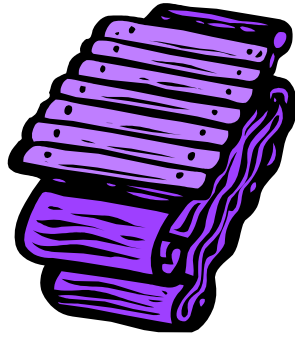
You will need to rehearse each part separately and sing the notes while they play to keep the class together.

Next, divide the class up into smaller groups so that each group has 2 or 3 melody players, a bonang a peking and a gong part. This varies the rehearsal to keep their interest.

More able pupils can rotate to play a different part

All the parts are printed on **Pupil Worksheet 1**. Below is the staff notation for all the tuned parts of *Gamelan Sem*.

The musical notation consists of two systems, each with four staves. The first system is labeled 'Peking', 'Melody', 'Bonang', and 'Gong'. The Peking and Melody parts are in treble clef, while the Bonang and Gong parts are in treble and bass clef respectively. Each staff ends with a repeat sign and 'X3'. The second system is identical to the first but starts with a '2' above the first measure of the Peking staff.



Teacher notes

Lesson 4

The finishing touches to Gamelan Sem

In this lesson, the class will perform *Gamelan Sem* with percussion parts and organise it into a structure, performing it to each other.

Practice each part so that pupils know what part they are playing.

Adding percussion

Pupils play a repeated percussion part. They could make up their own or follow the suggestion below

Count	1	2	3	4	5	6	7	8
Cymbal	X							
Tambourine	X				X			
Triangle	X		X		X		X	
Drum	X X		X X		X X		X X	

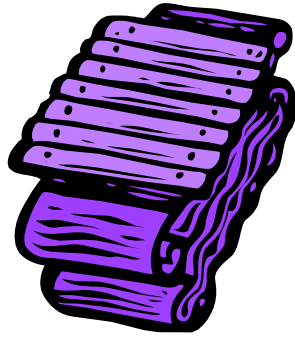
Organising the music

Now organise the music into an order where instruments join in at different times. A conductor could be used to cue in instruments

1. Melody
2. Melody & Bonang
3. Melody Bonang & Peking
4. Melody Bonang Peking & percussion x 4

Accelerando and ending

Gamelan music gradually gets quicker towards the end. The drummer generally is in charge of accelerandos. On the beats approaching the very end, the music slows down and finally ends on note 1 which is played together. Rehearse this carefully.



Teacher notes

Lesson 4

Performing Gamelan Sem

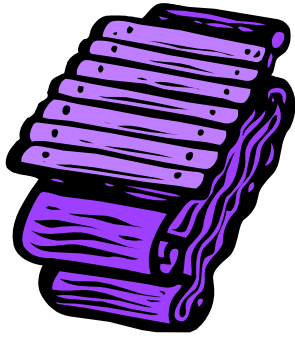
Make sure the instruments are laid out properly. Ask the pupils to imagine what kind of special event this music could be for :

Here are some suggestions :

- Harvest time
- A wedding ceremony
- A religious festival
- The beginning of Summer
- The arrival of an important person

Encourage a sense of occasion. If appropriate, pupils should remove their shoes, line up outside the classroom and enter in silence, taking their places at their instruments.

They should step around their instruments and not over them, since this is said to break the threads that take the sound from the instrument to heaven.



Teacher notes

Lesson 5

Composing a Gamelan piece

In this lesson the pupils are going to make up their own Gamelan music using the notes of *Gamelan Sem*

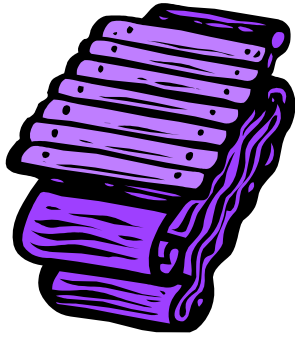
E F G B C

Using the blank grid on Worksheet 2, pupils write their notes in the spaces.

At the top of the worksheet, pupils should think about a special event where this music might be played.

It is suggested that each group have 6/7 pupils. When they perform, members of other groups can help with the percussion parts so that the composers can concentrate on tuned parts.

Each group should have melody, bonang, peking and gong players



Teacher notes

Lesson 6

Putting the finishing touches to the composition

Pupils should now rehearse their piece of music for performance to the rest of the class.

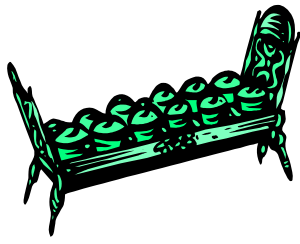
If necessary, extra percussion players should take part in each performance to ensure a full sound.

Again, encourage a sense of occasion. Each 'orchestra' should introduce itself, the music and talk about the special event before they play.

Discussion

After each performance discuss :

- Were they watching and listening?
- Did they create an interesting tune?
- Was the introduction and ending OK?



Pupil Worksheet 1

The Gamelan

Gamelan Sem : Tune 1st phrase

Note number	1	2	3	5	3	5	3	2
Note	E	F	G	B	G	B	G	F

Gamelan Sem : Tune 2nd phrase

Note number	6	6	5	3	5	3	2	1
Note	C	C	B	G	B	G	F	E

Order of the phrases

Phrase 1 (x3)

Phrase 2 (x1)

Gamelan Sem : Bonang part

REMEMBER TO PLAY OFF THE BEAT

Note number	1	2	3	3	4	4	3	3
Note	E	E	G	G	B	B	G	G

Gamelan Sem : Gong part

Count	1	2	3	4	5	6	7	8
Note number	1				3			6
Note	E				G			C



Pupil Worksheet 2

The Gamelan

These are the names of members of our Gamelan orchestra

This is the name of our piece _____

What does it celebrate? _____

Note number								
Note								

These are the notes for PHRASE 1 (Played 3 times)

Note number								
Note								

These are the notes for PHRASE 2 (Played once)

Note number								
Note								

This is the Bonang part for both phrases



Pupil Worksheet 2

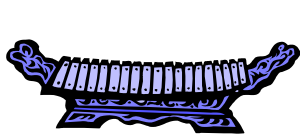
The Gamelan

This is the Gong part for both phrases

Count	1	2	3	4	5	6	7	8
Note number								
Note								

This is the percussion part for both phrases

Count	1	2	3	4	5	6	7	8
Cymbal								
Tambourine								
Triangle								
Drum								



Computer task

The Gamelan

Load the MIDI file called **gamelansem** into your sequencer software.

Listen to the music. It has 2 phrases. The first one is played 3 times and the second one is played once.

Move each of the parts so that :

- The percussion plays on its own for 8 bars
- Move the SARON part so that it starts at bar 9
- Move the GONG part so that it starts at bar 17
- Move the PEKING and BONANG parts so that they start at bar 25

Learn how to copy parts on your sequencer software.

- Copy each part so that they don't stop in the middle of the music