Module 1 – Lesson 4 Plan (Early Level)

Musical Maths

This Early Level lesson does not include quavers as we do not expect pupils to be able to count halves confidently at this stage. Should you have learners who are comfortable counting in halves you may wish to use the First Level lesson and activities.

Learning Intention
We are learning about musical beats.
We are exploring the relationship between musical beats and counting.

Lesson Outcome
At the end of this lesson, we will be able to:

- Explain how many beats each note lasts for
- Solve simple addition calculations where musical notes represent numbers.

Resources

- **Beat It! Teaching Slides**
- **Musical Maths Teaching Slides**
- **Musical Maths Worksheets** (p1-3)
- **Musical Note Flashcards**
- **Concrete materials for counting activities**
- **Pupils whiteboards/ show-me boards and pens**

Introduction

Share the learning intentions for the lesson. Recap the number of beats in each note. You may wish to use the **Beat It! Teaching Slides** to help.

Musical Maths

Using the **Musical Maths Teaching Slides** demonstrate to pupils how to create a musical equation by converting the musical note into a value based on how many beats it lasts for:

- crotchet + minim = 1 + 2 = 3
- whole note + minim = 4 + 2 = 6
- crotchet + minim + crotchet = 1 + 2 + 1 = 4

It may be useful to use whiteboards/show-me boards to let pupils convert the calculations as you work through each example.

Scottish Opera

Module 1 – Lesson 4 Plan (Early Level)
Musical Maths

Activity Time

Use the **Musical Maths Worksheets** to assess pupils' grasp of solving calculations where musical notes represent numbers.

Plenary

We suggest finishing with a physical activity. You may want to recap the Dance to the Beat actions or return to a version of Corners or Splat. This time, instead of placing the **Musical Note Flashcards** in the corners of the room, use the numbers 1, 2, 3, 4. Challenge pupils to find the number which matches the number of beats in a particular note/combination of notes. E.g. hold up the whole note for 4, or hold up the minim and the crotchet for 3.

Module 1 – Lesson 4 Plan (First Level)

Musical Maths

This First Level lesson includes quavers (½ beats). If you have learners who are not confident counting in halves you may wish to use the Early Level lesson and activities.

Learning Intention
We are learning about musical beats.
We are exploring the relationship between musical beats and counting.

Lesson Outcome
At the end of this lesson, we will be able to:
- Explain how many beats each note lasts for
- Solve simple addition calculations where musical notes represent numbers.

Resources

- **Beat It! Teaching Slides**
- **Musical Maths Teaching Slides**
- **Musical Maths Worksheets** (p1-8)
- **Musical Note Flashcards**
- **Concrete materials for counting activities**
- **Pupils whiteboards/ show-me boards and pens**

Introduction

Share the learning intentions for the lesson. Recap the number of beats in each note. You may wish to use the **Beat It! Teaching Slides** to help.

Musical Maths

Using the **Musical Maths Teaching Slides** demonstrate to pupils how to create a musical equation by converting the musical note into a value based on how many beats it lasts for:

- crotchet + minim = 1 + 2 = 3
- whole note + minim = 4 + 2 = 6
- crotchet + minim + crotchet = 1 + 2 + 1 = 4
- crotchet + minim + quaver = 3 ½

It may be useful to use whiteboards/show-me boards to let pupils convert the calculations as you work through each example.

Scottish Opera

Module 1 – Lesson 4 Plan (First Level)
Musical Maths

Activity Time

Use pages 1 to 8 of the **Musical Maths Worksheets** to assess pupils' grasp of solving calculations where musical notes represent numbers, where pages 4 to 8 offer greater challenge/complexity of calculations.

Plenary

We suggest finishing with a physical activity. You may want to recap the Dance to the Beat actions or return to a version of Corners or Splat. This time, instead of placing the **Musical Note Flashcards** in the corners of the room, use the numbers 1, 2, 3, 4. Challenge pupils to find the number which matches the number of beats in a particular note/combination of notes. E.g. hold up the whole note for 4, or hold up the minim and the crotchet for 3.

Module 1 – Lesson 4 Plan (First Level Ext.)

Musical Maths

This First Level Extension lesson is intended to encourage critical thinking and problem solving. It should only be tackled with classes who are secure and confident in converting notes to number values.

Learning Intention
We are learning about musical beats.
We are exploring the relationship between musical beats and counting.

Lesson Outcome
At the end of this lesson, we will be able to:
- Explain how many beats each note lasts for
- Solve simple addition calculations where musical notes represent numbers.

Resources

- **Musical Maths Teaching Slides**
- **Musical Maths Worksheets** (p9-14)
- **Musical Note Flashcards**
- **Concrete materials for counting activities**
- **Pupils whiteboards/ show-me boards and pens**

Introduction

Share the learning intentions for the lesson.

Let's Talk – Think, Pair, Share

This activity focuses on the number of beats in a single musical bar. Ask pupils to work with a shoulder/table partner to work out how many different combinations of notes would equal four beats.

Invite pupils to share suggestions – if possible mark these up on a whiteboard or wall that pupils can see. It may be useful to have some printouts of the **Musical Note Flashcards** to help. For example:

- whole note
- minim + minim
- 4 x crotchet
- 8 x quavers
- minim + crotchet + quaver + quaver.

Scottish Opera

Module 1 – Lesson 4 Plan (First Level Ext.)
Musical Maths

Musical Math-e-magic: Find The Missing Bar Lines

Using the second part of the **Musical Maths Teaching Slides** work with the class to figure out where the missing bar lines should be in the pieces of music. If you prefer you can continue to make this an active lesson by calling pupils to the front to hold up the **Musical Note Flashcards**, you can then use metre sticks or rulers to represent the bar lines.

Activity Time

Pages 9-14 of the **Musical Maths Worksheets** are designed to consolidate learning from this lesson. Pupils insert missing bar lines, or work out which notes are missing from a bar of music.

Plenary

You could return to a physical game to finish the lesson.