

CONTENT BASED TEACHING + PLURILINGUAL/CULTURAL AWARENESS ConBaT+

A SYMPHONY OF FRACTIONS

ORIOL PALLARÉS & CARLOTA PETIT

Task 3: Composing a Shymphony of Fractions

Worksheet 1: Applying math to make music

As you have learnt, note values express the duration of a note or a rest. This duration can be expressed as a fraction of a whole note.

For example: ¼ of a whole note is = (a quarter note)



1. Try to decipher the secret rhythm and write the corresponding note values.

The time signature of the music line is $\frac{-4}{4}$, so don't forget to write the measure lines. Use the following fractions in this order. You can choose two of the fractions to make them rests.

- How many measures does each of the music lines have?
- What fraction represents the addition of all the note values of each of the measures?
- What is the total duration of the rhythm? Remember that here.
 - 1. Clap the secret rhythm or use the rhythm nicknames you learnt.



2. Now we want you to create a different rhythm. But this time you will need to use

your musical creativity. The time signature will be $\frac{4}{4}$ again. And the total duration of the rhythm has to be the same as the rhythm above.



A SYMPHONY OF FRACTIONS

ORIOL PALLARÉS & CARLOTA PETIT

These are the values you must use and the minimum number of times you should use them

:

Note value	Number of times
Whole notes	1
Half notes	1
Quarter notes	3
Eighth notes	6
Sixteenth notes	8
Syncopation	1
Triplet	1
Dots	1

3. Clap both rhythms at the same time. Then, say the rhythms using the note value's English nicknames and later your own language note value's nicknames.



4. Then, give your rhythm to the other teams and get their rhythms. We are now going to challenge you to play two or three or more rhythms at the same time, so get together with another pair of students and play a few rhythms. Remember that a symphony is playing different parts at the same time.

Worksheet 2: Writing your Symphony of Fractions



1. Download a trial version of a **music notation software** and write your "symphony of fractions" using music notation, words, symbols... You will find a lot of music notation programs on the Internet.



CONTENT BASED TEACHING + PLURILINGUAL/CULTURAL AWARENESS ConBaT+

A SYMPHONY OF FRACTIONS

ORIOL PALLARÉS & CARLOTA PETIT

2. Convert your symphony to mp3 format and upload it to the net to share it with the world. Your teacher will tell you where to post your work.

Extension

- **3.** If you play a musical instrument, play one or more rhythms.
- 4. Choose a language you know and write some lyrics to sing along with your tune.