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by James Manwaring

INTRODUCTION

This resource focuses on the key areas of music theory that are common across all exam boards. I'll also share some ideas and strategies that have worked in my own lessons, with the aim of providing practical ways of teaching theory as well as ideas on how to approach the topic.

I HATE MUSIC THEORY!

I do indeed hate the term 'Music Theory'. At a parents evening, options evening or musical information evening, parents or students might say one of these things:

- 'I'm not good with the theory.'
- 'My son doesn't know any theory.'
- 'When I was at school, music theory was really hard.'
- 'How much theory is there in the GCSE?'

If you encounter any of these comments or questions, ask: 'Are you asking this about other subjects?'

This obsession with music theory is understandable, but we should all try and change it. It's important that students to see music differently, and opt for our subject at GCSE. Using the term 'music theory' can in itself separate it from all that we study, and make it into an unfathomable thing that puts some students off.

THREE-DIMENSIONAL MUSICIANS

But music theory is also, of course, the gateway to musical understanding. We need to teach it with our three-dimensional music students in mind. They are **performers**, **listeners** and **composers**, and music theory should be taught through all three of these strands.

Furthermore, all three of these areas are intrinsically linked. Whenever students are performing, they are listening. Whenever they are composing, they are thinking about how a piece will be heard and how it will be performed.

It's crucial that students see music theory as an active part of their learning, not some kind of separate, daunting entity that's only important for Grade 5 theory exams. It should be alive in every single music lesson.

THE HUMAN PIANO

The Human Piano is a task that requires students to create a human piano by lying on the floor. You might like to have students keep their blazers on for the black notes, and take blazers off for the white notes. It is a lesson that can be used to introduce a number of key areas of music theory:

1. It introduces students to a visual representation of a piano keyboard. Not every student plays the piano, but it's very useful to understand the piano and be able to visualise the keyboard.
2. By forming a piano keyboard, students become more aware of tones and semitones. Students can often misunderstand the gaps between B and C, and between E and F. This task helps to sort those issues out in a fun and engaging way.

3. The Human Piano is kinaesthetic: students usually remember the lesson, and it helps to break down the notion that music theory is a paper-based exercise, and therefore dry and boring.
4. Once the piano is formed, you can start to teach students about intervals. Using the human keyboard, they can visualise the gaps and changes in intervals.
5. Once the students are all lying on the floor, you can shout out notes and get them to sit up if they are that note. If you have a larger class than one human piano (12 students minimum are required), then the others can stand on chairs and look down on the piano. Get the other students to shout out notes, and they can see if the correct student sits up.
6. You can also move on to chords, and students can be required to sit up to form a chord. Starting with notes means that they should be aware of which note they are. Ask the remaining students to shout out a chord and then check that the correct students are sitting up.
7. Once you've mastered notes and chords, move on to look at keys. Students can be asked to sit up if they're required for a certain key signature. Again, use remaining students to call out scales and check on who sits up.
8. And then move on again to look at inversions, suspended chords and extended chords such as 7ths.

THEORY GAMES

The best way to teach theory is in such a way that students not only enjoy learning about it, but also see the benefits of it for their GCSE studies. What we want is for students to understand that if they can identify a key, a chord or a scale, then it will help them with their appraising, performing and composing. One way of achieving this is to play some games using music theory.

1. **Rubbish questions:** students write a key theoretical term on a piece of paper and screw that piece of paper up. Students then throw the bits of paper at each other, grab a piece and then have to define or explain the term. Pick the right time for such a game, and obviously use all your behaviour management skills to keep it focused on the learning! You could even stand in the middle and let the students throw their paper them at you.
2. **Celebrities** – For a number of years I have played a game called Celebrities (which has several other names). If you're playing at home, put names in a bowl and then guess the names – think charades but with a twist. But you can also use it with music theory terms, and there are three rounds. First, students should write down three terms each on a piece of paper, ideally music theory words from a range of topics.
 - ❑ **Round 1:** they can use as many words as they like to explain the term, and their team has to guess the term. Once all the pieces of paper have been used, they are all put back in the bowl and the next round begins.
 - ❑ **Round 2:** they are only allowed three words to explain what's on their piece of paper. They've heard the words before, but did they sink in? And can they explain them with fewer words?
 - ❑ **Round 3** begins once all words have been used and put back in the bowl. Here, no words can be used, only actions. This is always fun as students have to work out how they are going to act out ternary form, hemiola or perfect cadence.
3. **Music theory bingo:** students create a bingo-style sheet at the start of a lesson, and when topics appear in the lesson, they can check them off and shout 'Bingo!' when they have a complete line or row.
4. **Find the feature:** this is a great game for anybody who has to study set works for GCSE. As the teacher, you shout out a music theory feature or concept, for example cycle of 5ths. The students then have to find this feature in one of their set works and shout out the bar number. A good twist is to then play them a feature either on piano or from the set work, and then ask them to find it.

ONLINE AND SOFTWARE RESOURCES

There are lots of great resources out there for students to use, and which they can use at home. Setting cover can sometimes be difficult in music, but where students have computer access they can easily use these websites to help develop their theory knowledge.

1. **Teoría** is a great website for music theory since it is packed full of so much. There are tutorials on theory and some great online quizzes and tests. Particularly strong is the ear training section, where students can test their aural knowledge of intervals, notes, chords, scales and rhythms.
2. **Musictheory.net** is another useful website with lots of great lessons, exercises and tools. This site is particularly helpful for students who need help with some of the basics of notation and score reading.
3. **Triptico** is another great online platform for creating fun and enjoyable games and quizzes.

WHERE DO I START WITH THEORY?

There's no right or wrong way to start with music theory, and of course, every student approaches it from a different starting point. Many students will already be able to read music by GCSE, but they might not fully understand the theory. Some will know a bit about chords and keys, but won't understand how it all fits together and why. That's why it's important to start GCSE courses with a clear and fresh approach to theory.

Isn't music amazing?

We all want students to be in awe of music, and to appreciate just how magnificent it is. Start by writing the seven letters that we use in our musical scale. Point out to students that in essence, every piece of music that has ever been composed (and will ever be composed) is created using just those seven notes. Obviously, you can then move on to looking at sharps and flats, and to considering the fact that in some cases many more actual notes are used. Then you can move on to musical modes.

Modes

Start by playing a C major scale on the piano and asking the students what they have heard – hopefully they will say a major scale. Then play them the Dorian mode starting on D and ask them what has changed. They might comment that it sounds a bit different, or that you have added some black notes to make it 'minor'. They might be surprised – and intrigued – to hear that it's actually the same notes but in a different order.

Modes are a great starting point for theory because they can naturally lead into patterns of tones and semitones. Students will start to apply their knowledge of the piano, and start to grasp the patterns that underpin so much of music.

I DON'T PARTICULARLY LIKE MODES A LOT

Ionian mode: TTSTTT S

Dorian mode: TSTTT ST

Phrygian mode: STTTSTT

Lydian mode: TTTSTTS

Mixolydian mode: TTSTTST

Aeolian mode: TSTTSTT

Locrian mode: STTSTTT

Studying these modes is great for a number of reasons:

1. Students start to understand tones and semitones.
2. Playing them gets students listening, thinking about and creating music.
3. It helps to lead into the concept of key signatures, and how we came to have major and minor.
4. Modes are great for composing short melodies that can be used in students' own compositions.

Major and minor key signatures

Once you've taught students about modes, move on to major and minor key signatures. It's really important for them to understand that a key signature is all about a set of notes that create a specific pattern, rather than just learning that there are two sharps in D major, for example. As teachers, we want students to grasp the way in which music theory is built on a fundamental understanding of notes being put together in a certain way to form keys, scales and chords.

Father Charles Goes Down And Ends Battle

Have you have heard that sentence before? It's one that students tend to remember really well. Take them through the diagram below and start to discuss the way in which every key has a different combination of notes, but retains a pattern of tones and semitones. You want students to have a broad understanding and not just try and memorise key signatures. You also want them to be able to use and understand modal music, as well as music in major and minor.

Music Theory Fact-Sheet 1

Major Keys:

~~X~~ C G D A E B F# C#

0 1 2 3 4 5 6 7

F# C#

6 7

G b D b A b E b B b F

6 5 4 3 2 1

So for example:

- E Major has 3 flats
- C Major has 0 sharps or flats
- F# Major has 6 sharps
- B Major has 5 sharps

Minor Keys:

a e b f# c# g# d# a#

0 1 2 3 4 5 6 7

d# a#

6 7

e b b b f c g d

6 5 4 3 2 1

So for example:

- B Minor has 5 flats
- B Minor has 2 sharps
- F# Minor has 3 sharps
- B Major has 5 sharps

The order of sharps used for each key →

F C G D A E B

← **The order of flats used for each key**

So for example:

- In D Major we need - F# & C#
- In E Major we need - F#, C#, G# & D#
- In F Minor we need - B b , E b , A b & D b
- In C Minor we need - B b , E b , A b

Music Theory Fact-Sheet 2

Major Scale:

We will use C-Major as an example:

C D E F G A B C

T T S T T T S



Here is the pattern of Tones & Semi-tones that we use to form a Major Scale.

Every Major Scale has to have 7 different notes. Start by writing out the seven notes starting with the Tonic note (the note name of the scale). One you have the seven notes you can then look at Fact-Sheet 1 and work out how many sharps to add and which sharps they are.

Here are some example Major Scales:

G A B C D E F# G
 A B C# D E F# G# A
 B^b C D E^b F G A B^b
 D^b E^b F G^b A^b B^b C D^b

Minor Scale:

We will use G-Minor as an example:

g a b^b c d e^b f# g

T S T T S T+S S



Here is the pattern of Tones & Semi-tones that we use to form a Minor Scale. Notice that we also have to sharpen the seventh note of the scale. We do this every time. If the note is flat to start with then it will become natural (n) e.g. in C Minor.

You can work out the Minor Scales in much the same way as the Major Scales. You just have to remember to Sharpen the Seventh note. If we Sharpen the seventh note on the way up the scale and the way back down then we call the scale The Harmonic Minor. If however we sharpen the sixth and seventh degree of the scale on the way up and then just play the key signature on the way down we call the The Melodic Minor. Lets focus on Harmonic Minor to start with.

Here are some example Harmonic Minor Scales:

a b c d e f g# a
 b^b c d^b e^b f g^b a[#] b^b
 b c# d e f# g a# b
 f g a^b b^b c d^b e[#] f

Intervals

Intervals pop up in various ways across most of the GCSE specifications, and they're not too complicated for students to grasp. Why not turn to the Human Piano to look at the 'gaps' between notes so that students can visualise how intervals can change?

It's important for students to know the interval names, but it's also important for them to understand how they are formed. Great discussions about music can come from talking about how two intervals can sound the same and yet have different names, taking them on to enharmonic equivalents.

Perfect Unison Major Second Major Third Perfect Fourth Perfect Fifth Major Sixth Major Seventh Perfect Octave

Perfect Unison Minor Second Minor Third Augmented Fourth Diminished Fifth Minor Sixth Minor Seventh Perfect Octave

You might like to add to the diagrams above, and ask students to do the same. The more they interact with intervals, the better. They can also use the websites mentioned above to test their knowledge and understanding. Ask them to write out different intervals and then check them with a partner.

Intervals will appear in different settings and contexts throughout the students' studies. They will have to think about intervals when they compose, be able to spot them on paper, and also recognise them aurally in an exam.

Another way of teaching intervals is to get students to sing them. Ask your students to try and find songs that begin with a range of different intervals, or simply use the examples below:

Interval	Ascending	Descending
Minor 2nd	Pink Panther theme	Joy to the World
Major 2nd	Happy Birthday to You	Three Blind Mice
Minor 3rd	So Long, Farewell (from <i>The Sound of Music</i>)	Hey Jude
Major 3rd	When the Saints Go Marching In	Swing Low, Sweet Chariot
Perfect 4th	We Wish You a Merry Christmas	Oh Come, All Ye Faithful
Tritone (Augmented 4th/diminished 5th)	Maria (from <i>West Side Story</i>)	Enter Sandman (by Metallica)
Perfect 5th	Twinkle, Twinkle, Little Star	What Shall We Do with the Drunken Sailor?
Minor 6th	The Entertainer (third and fourth notes)	Love Story theme
Major 6th	My Bonnie Lies Over the Ocean	Nobody Knows the Trouble I've Seen
Minor 7th	Somewhere (from <i>West Side Story</i>)	Watermelon Man
Major 7th	Somewhere Over the Rainbow (first and third notes)	I Love You (Cole Porter)
Octave	Somewhere Over the Rainbow	Willow Weep for Me

Chords and cadences

By now, students hopefully understand how to create a key signature, and therefore know which notes they have available when working in a certain key. The next step is to get them thinking about triads in major and minor keys.

The image displays two musical staves illustrating triads. The first staff shows triads in C major: C Major, D Minor, E Minor, F Major, G Major, A Minor, and B Diminished. The second staff shows triads in C minor: Cm, D°, Eb+, Fm, G, Ab, and B°, with Roman numerals i, ii, iii, iv, V, VI, and vii below them.

It's important for students to learn the names, symbols and the Roman numerals for the triads, so that they can use all versions in their work. At this stage, get them to use some software or a piano to start playing around with triads to create chord progressions. It's one thing to know the theory, but it's quite another to be able to apply it. We need our students not only to understand how to recognise chords, but also to use them in their compositions. When they are in a minor key in particular, we want them to engage with all of the chords on offer.

From this point on, consider chord inversions and how to form cadences and use the cycle of 5ths. This will again embed the knowledge in students' heads, and test them on its application to a harmonic device.

PAPER PLATES AND MASKING TAPE

This is another idea that gets students out of their seats and composing in a very different way. First, create some musical staves on your music room floor using masking tape – you can create a treble and a bass staff if you wish, and one or two of them. Students should then use paper plates to create chords, melodies and scales on the floor. You can shout out a chord or a cadence, for instance, and they have to make it. You could ask them to notate a short phrase that you play them on the piano.

The applications are endless, but again it's a kinaesthetic activity that gets them thinking about theory and applying it to composition. If you have students who can already read music well, then get them to play a tune on their instrument that others have to notate. Using more advanced students to help lead a lesson is a really good way of stretching them.

LEARN THROUGH COMPOSITION

By now, students have hopefully learnt the fundamentals of pitch, scales, keys, chords, cadences and harmony. We now need to move on to rhythm, metre and dynamics.

It's worth considering using composition throughout the year, not only to get students composing, but also to teach them about music theory. But it's not so much a case of teaching them music theory within composition, more encouraging them to create and listen, so that they learn the theory as they go.

Here are some compositional exercises to get students thinking about rhythm, metre, time, tempo and dynamics. At this stage, these ideas also start to combine with chords, keys and cadences:

1. Create a piece of music for an untuned percussion instrument that explores three different time signatures.
2. Write a snare drum solo that shows off dotted rhythms, rests and triplets.
3. Choose a nursery rhyme and change it from major to minor, or from minor to major.
4. Create a chord progression that includes a perfect cadence, and imperfect cadence and a plagal cadence.
5. Write a melody that explores intervals. Aim to use as many intervals as you can, but make sure that they sound like they work within the melody.
6. Choose one note as pedal note (a repeating note in the bass). Now write a modal melody over the top of this note.
7. Take a famous melody and change its rhythms to create a variation. Don't change any of the notes or intervals, but change the time signature wherever you wish.

Collected together, short exercises such as these can start to form a sketchbook of musical ideas. These ideas can then be used in more extensive compositions, and will also embed all of the theory that the students have learnt.

TOP TEN THEORY TIPS

1. Never suggest that music theory is complicated and hard to grasp. It isn't, and students will enjoy it if you make it enjoyable – and if you enjoy it yourself.
2. Where possible, make it practical. At Christmas, for example, use Christmas carols: take a carol and play it with different rhythms, turn it from major to minor, and even try playing it backwards.
3. Encourage students to experiment with ideas both at a computer and using their own instrument. Getting them improvising melodies and then discussing what they are doing will help them to grasp some useful theory.
4. Where possible, play one of your set works so that students can experience the theory they are studying.
5. Encourage students to write down music on paper away from a computer. It gets them thinking about what they are writing down, and also helps to secure their understanding. A computer can be helpful, but there's nothing wrong with old-fashioned manuscript paper.

6. Avoid doing a theory-only lesson, since that can be off-putting. Centre a lesson around music, either listening, playing or composing. Once students are doing that, you can easily draw out the theory as you go. The more practical the better, and make music the target language of the lesson.
7. Students really enjoy composition tasks where they have to demonstrate a set number of things. For example, ask them to compose a 30-second piece that explores compound time, syncopation and the Aeolian mode.
8. Students will often benefit from creating their own music theory fact sheets, such as the ones I've included above. They could create one on rhythm, metre and tempo.
9. The book *Step up to GCSE Music* (Rhinegold Education) offers a 14-session course that presents music theory very well. It's split up in such a way that students could use the book over the summer before they start the GCSE course, or even during the first term.
10. Ask students to try Classic FM's 'hardest music theory quiz you'll ever take'. Although they might not get all the answers right, it will get them thinking.

CONCLUSION

Music theory is the bedrock of everything we teach in music. But it doesn't need to drain us or sap the life out of our lessons. When approached well and embedded into all areas of music, it becomes useful, exciting and interesting to learn about. The exam is always a goal, of course, but we need to ensure that we're helping our students to understand music. This resource has touched on a range of topics that can all be easily extended. However you approach theory, make sure that students are applying it to composition, listening and performing. Every piece of theory they learn can easily be applied to a short compositional exercise, which will ensure that they have fully grasped the topic.