Understanding all the Regular Time Signatures

1. In Levels One and Two, you studied time signatures most commonly used. The following chart compares simple and compound time signature.

<table>
<thead>
<tr>
<th>DUPLICATE (2 beats)</th>
<th>SIMPLE TIME</th>
<th>COMPOUND TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2</td>
<td>(\frac{\cdot}{\cdot})</td>
<td>6/4</td>
</tr>
<tr>
<td>4/4</td>
<td>(\frac{\cdot}{\cdot})</td>
<td>6/8</td>
</tr>
<tr>
<td>8/8</td>
<td>(\frac{\cdot}{\cdot})</td>
<td>16/8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRIPLE (3 beats)</th>
<th>SIMPLE TIME</th>
<th>COMPOUND TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/2</td>
<td>(\frac{\cdot}{\cdot})</td>
<td>9/4</td>
</tr>
<tr>
<td>3/4</td>
<td>(\frac{\cdot}{\cdot})</td>
<td>9/8</td>
</tr>
<tr>
<td>3/8</td>
<td>(\frac{\cdot}{\cdot})</td>
<td>16/8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QUADRUPLE (4 beats)</th>
<th>SIMPLE TIME</th>
<th>COMPOUND TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/2</td>
<td>(\frac{\cdot}{\cdot})</td>
<td>12/4</td>
</tr>
<tr>
<td>4/4</td>
<td>(\frac{\cdot}{\cdot})</td>
<td>12/8</td>
</tr>
<tr>
<td>4/8</td>
<td>(\frac{\cdot}{\cdot})</td>
<td>16/8</td>
</tr>
</tbody>
</table>

2. It is very important to understand that in simple measures, the beats are divisible by two, and in compound time, the beats are divisible by three.

3. Observe attentively the time signatures that are less common, for you will surely find them in your musical pieces.

**Note:** As in simple time, notes and rests in compound time are grouped so as to make the divisions of the beats as clear as possible. All the notes belonging to one beat are grouped together.
A) Complete the following measures by adding a note or a rest.

B) Complete the following measures by using either the thirty-second note or the sixty-fourth note.
4. As you studied in Level Two, an interval is the distance of pitch between two notes. We also studied the specific names for the size (2nd, 3rd, 4th, etc.) and quality (major, minor) of each interval.

5. Notice that the unison, fourth, fifth, and octave are called PERFECT, but the second, third, sixth, and seventh, can be called MAJOR or MINOR. All intervals are named, as the lower note is, for the moment, the TONIC.

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Major or Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>unison</td>
<td>second (2nd)</td>
</tr>
<tr>
<td>fourth (4th)</td>
<td>third (3rd)</td>
</tr>
<tr>
<td>fifth (5th)</td>
<td>sixth (6th)</td>
</tr>
<tr>
<td>octave (8ve)</td>
<td>seventh (7th)</td>
</tr>
</tbody>
</table>

6. To determine the nature of each interval, we can use the major scale as a reference point, because all intervals are perfect or major depending on the type of interval.

7. The word AUGMENTED means “made larger”. When a perfect or major interval is made larger by a half step or semitone, it becomes an Augmented Interval.

8. The word DIMINISHED means “made smaller”. When a perfect or minor interval is made smaller by a half step, it becomes a Diminished Interval.
To simplify the terms minor, augmented, etc., they can be written as outlined in the chart below. Either method is acceptable but remember to stick to one or you may become confused.

<table>
<thead>
<tr>
<th>Major</th>
<th>M</th>
<th>+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor</td>
<td>m</td>
<td>-</td>
</tr>
<tr>
<td>Augmented</td>
<td>aug</td>
<td>x</td>
</tr>
<tr>
<td>Diminished</td>
<td>dim</td>
<td>o</td>
</tr>
</tbody>
</table>

After having been able to qualify the second and the third intervals in Level Two, you will now learn how each perfect interval is composed (unison, 4th, 5th, 8ve).

**Unison:** Two notes or more of the same sound is a Unison.

**Fourth:** All notes that have the same accidentals (♯ to ♭) are perfect except F and B and their derivatives (F♯ and B♭, etc).
To obtain a perfect fourth between these two notes, the interval has to have a F♯ and a B or an F and a B♭.
As mentioned above, if the interval is a semitone larger, it becomes augmented.
If the interval is a semitone smaller, it becomes diminished (4th = 2½ tones)

**Fifth:** The same rule applies with this interval as the fourth (5th = 3½ tones)
Octave: If the two notes have the same name and the same accidental, the interval is considered perfect. If the interval is a semitone larger, then it is augmented. If the interval is a semitone smaller, it is diminished.

Do not take for granted that once a note is sharp the interval automatically is augmented or if the note is flat, it is automatically diminished. The important factor here is the distance between both notes. Always remember that the bottom note is considered the TONIC. (even without a key signature present). You must take into consideration the key when calculating your interval.

When an interval is turned upside down, it becomes inverted. You can invert an interval two ways:

1) write the lower note above the upper one, and
2) visa versa.

When an interval is inverted:
- a major interval becomes minor
- a minor interval becomes major
- an augmented interval becomes diminished
- a diminished interval becomes augmented
- a perfect intervals remain perfect

Note: The number of the interval plus the number of the inversion always add to nine.
A) Find the complementary interval to complete the octave:

B) Identify and name the following intervals:

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28
c) Complete the following intervals:

```
Perfect 4th  Perfect 5th  Major 3rd  Minor 3rd  Major 3rd  Perfect 5th  Major 3rd
```

```
Perfect 8ve  Major 3rd  Major 2nd  Major 3rd  Dim. 5th  Major 3rd  Perfect 8ve
```

```
Aug. 4th  Major 3rd  Minor 3rd  Major 2nd  Minor 3rd  Minor 2nd  Perfect 5th
```
Melodic Minor Scales

12. In Level One, you learned that the minor scales come in three forms: the natural minor, the harmonic minor, and the melodic minor scales. We have seen the first two scales, now it is time to study the third - the MELODIC MINOR SCALE.

13. You remember that to find the tonic of the relative minor scale, you either take the sixth scale degree of the major scale or take the tonic and move backwards three semitones. 

C Major

\[ \text{Tonic of the relative minor scale} \]

14. Taking this new note as tonic, you create another scale (a series of 8 adjacent notes) and you keep the key signature of the major scale.

A minor

15. To find a melodic minor scale from the natural minor, you have to raise the VI and VII scale degrees a semitone higher when ascending and then lower them a semitone when descending returning them to their natural state according to the key signature.

A melodic minor

In another key Relative minor scale of F Major

D melodic minor
A) Construct the melodic minor scale of the following major scales (ascending and descending).

D Major

B Major

E Major

D Major

F Major
16. A chord is the name given to any three or more notes sounded simultaneously. The most basic chord is a TRIAD, that is, three sounds built up in thirds.

17. These triads may be built on each degree of major and minor scales. The note that they are built on, that is, the lowest note, is called the ROOT (C - of the C major scale) of the triad. The next note is a diatonic third above the root and it is named the THIRD (E), and the third sound is a diatonic fifth above the same root called the FIFTH (G).

18. No matter how the notes are placed on the staff, the chord remains the same. For example, these three chords (below) all belong to the chord of C major.
19. A major perfect chord is composed of a root, a major third, and a perfect fifth. A minor chord is composed of a root, a minor third, and a perfect fifth.

![Chord Diagram](image)

20. You can therefore state that it is the nature of the third that will determine if the chord is major or minor. On the other hand, the perfect fifth belongs to both chords. Examine the following examples of the major and minor chords.

![Chord Example](image)
A) Name the following chords (major or minor)

B) Compose the following chords
21. Throughout your musical training, you will have to recognize and understand new Italian words that you will frequently find in musical pieces. These terms are the composer's way of expressing the interpretation of the musical piece. Certain words correspond to tempo, variation of tempo, and style, etc.

22. The following are words that you might find in a musical piece at your level.

**Variation in Tempo**

<table>
<thead>
<tr>
<th>Italian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>piu mosso</td>
<td>more movement, quicker</td>
</tr>
<tr>
<td>meno mosso</td>
<td>less movement, slower</td>
</tr>
</tbody>
</table>

**Style**

<table>
<thead>
<tr>
<th>Italian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>animato</td>
<td>animated</td>
</tr>
<tr>
<td>con moto</td>
<td>with motion</td>
</tr>
<tr>
<td>espressivo</td>
<td>expressively</td>
</tr>
<tr>
<td>leggero</td>
<td>light and graceful</td>
</tr>
<tr>
<td>maestoso</td>
<td>majestically, dignified</td>
</tr>
<tr>
<td>tranquillo</td>
<td>tranquil</td>
</tr>
</tbody>
</table>

**Adverbs used in conjunction with other words**

<table>
<thead>
<tr>
<th>Italian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>non troppo</td>
<td>not too much</td>
</tr>
<tr>
<td>troppo</td>
<td>too much</td>
</tr>
<tr>
<td>molto</td>
<td>very much</td>
</tr>
<tr>
<td>simile</td>
<td>the same</td>
</tr>
</tbody>
</table>
Transposition

23. When a melody is rewritten with the exact same sequence of notes and intervals into another key, it is called transposition. This raises or lowers the notes to make a melody easier to sing or play, or so an instrument can play it in another key.

24. In Level Two, you also studied transposition by an octave higher or an octave lower. At times it is necessary to change clef due to too many ledger lines. The following melody was transposed an octave lower. In the original clef, it is difficult to read, but in the new clef it is much clearer.

Original melody

Transposed melody an octave lower

Rewritten in the bass clef

25. Knowing that the middle C can belong to both clefs, all that is left to find is the other notes from this reference point.
26. Whatever the transposition, if the melody is written too high or too low, you can always change the clef. Look at the following example. In the bass clef, the melody is written too high, therefore, it was necessary to transpose it in the treble clef.

Original melody

Transposed melody an octave lower

Transposing by Changing the Key

27. It will happen that the key of a musical piece is not suited for a voice or an instrument. When this is the case, the melody can be transposed in another key.

28. To transpose the melody, you must know the key of the original melody and the new key. For example, the melody is written in C major and you want to transpose it to a major second higher. The new key has to be a major second higher from C. Once the key is found, the new key signature is written down.

C major

D major
Once the new key is found, each note of the original melody is transposed a major second higher. **Only the name of the notes change.** Everything else remains the same.

C major

D major (major 2nd higher)

As for the alterations, they have already been placed at the key signature. If however, while transposing, there are accidentals, you must take them into consideration when finding the new note at the desired interval.

E♭ major

F major (major 2nd higher)

If you want to transpose the melody a major 2nd lower, for example, you proceed in the same manner.
A) Transpose the following melodies a major 2nd higher.

```
\[\text{Musical notation}\]
```

B) Transpose the following melodies a major 2nd lower.

```
\[\text{Musical notation}\]
```
C) Transpose the following melodies by an octave using different clefs.

1) an octave higher

2) an octave lower
A) Which intervals belong to the category of minor and major?

B) Which intervals belong to the category of perfect?

C) Name the following intervals:

1__  2__  3__  4__  5__  6__  7__

8__  9__  10__  11__  12__  13__  14__

15__  16__  17__  18__  19__  20__  21__

22__  23__  24__  25__  26__  27__  28__
D) Construct a melodic minor scale from its relative major (ascending and descending)

B♭ major

G♭ major

E major

C♭ major

harmonic minor

melodic minor
E) Name and identify the following chords:

```
\begin{align*}
1 & \text{ } 2 & \text{ } 3 & \text{ } 4 & \text{ } 5 & \text{ } 6 & \text{ } 7 \\
8 & \text{ } 9 & \text{ } 10 & \text{ } 11 & \text{ } 12 & \text{ } 13 & \text{ } 14 \\
15 & \text{ } 16 & \text{ } 17 & \text{ } 18 & \text{ } 19 & \text{ } 20 & \text{ } 21
\end{align*}
```

F) Name the following complementary or inverted intervals. Identify them as well (maj., min., dim., aug.).

```
\begin{align*}
\text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } \\
\text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ }
\end{align*}
```
G) Match the word with its definition:

<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animato</td>
<td>expressively</td>
</tr>
<tr>
<td>Simile</td>
<td>not too much</td>
</tr>
<tr>
<td>Maestoso</td>
<td>with spirit</td>
</tr>
<tr>
<td>Non troppo</td>
<td>same</td>
</tr>
<tr>
<td>Tranquillo</td>
<td>less movement</td>
</tr>
<tr>
<td>Piu mosso</td>
<td>very much</td>
</tr>
<tr>
<td>Meno mosso</td>
<td>more movement</td>
</tr>
<tr>
<td>Molto</td>
<td>with motion</td>
</tr>
<tr>
<td>Con moto</td>
<td>tranquil</td>
</tr>
<tr>
<td>Espressivo</td>
<td>too much</td>
</tr>
<tr>
<td>Leggiero</td>
<td>light and graceful</td>
</tr>
<tr>
<td>Troppo</td>
<td>majestically</td>
</tr>
</tbody>
</table>

H) Complete the following measures by using one note or rest.

```
\[\text{Notation}\]
```
i) Transpose this melody a major 2nd higher.

\[ \begin{array}{c}
\text{\includegraphics[width=\textwidth]{melody1.png}} \\
\end{array} \]

j) Transpose this melody a major 2nd lower.

\[ \begin{array}{c}
\text{\includegraphics[width=\textwidth]{melody2.png}} \\
\end{array} \]

k) Transpose this melody an octave higher. Use the appropriate clef.

\[ \begin{array}{c}
\text{\includegraphics[width=\textwidth]{melody3.png}} \\
\end{array} \]