

# VAN TECH MUSIC



## MUSIC THEORY LEARNING GUIDE

### LEVEL IIA

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## MUSIC THEORY PROGRAM - LEVEL IIA

The Level IIA Program is intended for students in Intermediate Band, Junior Orchestra, and new members of the Concert Choir. The program focuses on further development of skills in reading, notation, meaning, and language of music. New to this level is the introduction of aural skill expectations.

Activities are noted in each section of this program guide and additional resources will be available at [www.vtmusic.ca](http://www.vtmusic.ca).

Each Friday, the Music Room (511) will be home to a *Theory Club* tutorial. Students are encouraged to seek assistance from their friends and by attending these tutorial sessions.

Examinations for Level IIA will take place at each sitting of Theory Program exams - once in January and once in June, annually. **Students must write the exams until they have completed Level IIIB.**

### Topics for Level IIA

1. Scale Identification
  - a. Major Scales
  - b. Natural Minor Scales
  - c. Harmonic Minor Scales
2. Scale Degree Identification
3. Triads
  - a. Major Triads
  - b. Minor Triads
  - c. Inversions
4. Intervals
  - a. Major & Perfect Intervals
5. Rhythm
  - a. Dotted Rhythms
- b. Time Signatures
- c. Counting System
6. Aural Skills
  - a. Scales - Major or Natural Minor?
  - b. Triads - Major or Minor?
  - c. Intervals - Major & Perfect
  - d. Rhythmic Dictation
7. Italian Terms
  - a. tempo
  - b. dynamics
  - c. style
  - d. technique
  - e. form

## 1. Scale Writing

In Level 1A we learned about how a scale is a sequence of pitches, ascending or descending, that follow a pattern of semitones and whole tones.

### A. Major Scales

Major scales will contain 8 pitches, exactly one octave in range. If the scale starts on C, it will continue up (or down) until you reach the next C.

Using your knowledge of semitones (ST) and whole tones (WT), you will be able to identify that a pattern of these exists in all Major scales. The pattern is shown below.

Musical notation for a C Major scale. The scale is written on a grand staff (treble and bass clefs). The notes are C, D, E, F, G, A, B, C. The intervals between notes are labeled as follows: WT (Whole Tone) between C and D, WT between D and E, ST (Semitone) between E and F, WT between F and G, WT between G and A, WT between A and B, and ST between B and C. Brackets and arcs are used to group the notes and indicate the intervals.

### B. Natural Minor Scales

Natural minor scales will also contain 8 pitches, exactly one octave in range. However, the pattern of semitones and whole tones is different.

Musical notation for a C Natural Minor scale. The scale is written on a grand staff (treble, bass, and a third staff). The notes are C, D, E-flat, F, G, A, B-flat, C. The intervals between notes are labeled as follows: WT (Whole Tone) between C and D, ST (Semitone) between D and E-flat, WT between E-flat and F, WT between F and G, ST between G and A, WT between A and B-flat, and WT between B-flat and C. Brackets and arcs are used to group the notes and indicate the intervals.

Notice that the key signatures of 'C Major', shown earlier, and 'a natural minor' shown above are the same. However, the combination of whole tones and semitones is different.

Every Major scale has a relative natural minor scale, which starts on the 6th scale degree of the Major scale and continues in sequence for one octave. For example, in the key of C Major the 6th scale degree is A, and 'a minor' is the relative minor key to C Major.

## C. Harmonic Minor Scales

Composers are able to create engaging music through creating moments of tension and release in the music they write. That tension can be made more or less intense by changing a single pitch in a melodic passage.

Similarly, modifying a single pitch in a natural minor scale creates a harmonic minor scale. In the example below, you'll see the same pitches as the 'a natural minor' scale you've seen above. There is, however, one important difference when you look at the 7th pitch, which you'll notice is raised by one semitone.

The image shows three staves of musical notation for the A harmonic minor scale. The top staff is in treble clef, the middle in bass clef, and the bottom in bass clef. The notes are A, B, C, D, E, F, G# (labeled 'raised 7th'), and A. Intervals between notes are marked as WT (Whole Tone) or ST (Semitone). Stars (\*\*) are placed between the 6th and 7th notes in each staff to indicate a larger interval.

Where you see the stars, between the 6th and 7th pitch, the interval is *larger* than a whole tone. The interval is a minor 3rd, which you'll learn about in a future theory package.

### Activity

1) Visit [www.vtmusic.ca](http://www.vtmusic.ca) and download the Scale Writing Activity. To check your work, ask a friend or attend one of the Friday *Theory Club* tutorials.

## 2. Scale Degree Identification

In level IA we learned that there are two ways of identifying where a certain pitch fits into the scale of a given key. For our purposes, we will only learn the modern system using **scale degree numbers**. In the example below, you'll see a C Major scale with the scale degree number identified below. To ensure that others will understand how you use the numbers, you must always place a **caret (^)** above the number.

The image shows a single staff of musical notation for the C major scale in bass clef. The notes are C, D, E, F, G, A, B, and C. Below each note is a scale degree number (1 through 8) with a caret (^) above it.

To identify the first scale degree, you need to look at the name of the key. For example, in C Major, the first scale degree is C. This information will be useful when learning about triads, Major and minor key relationships, and intervals.

## Activity

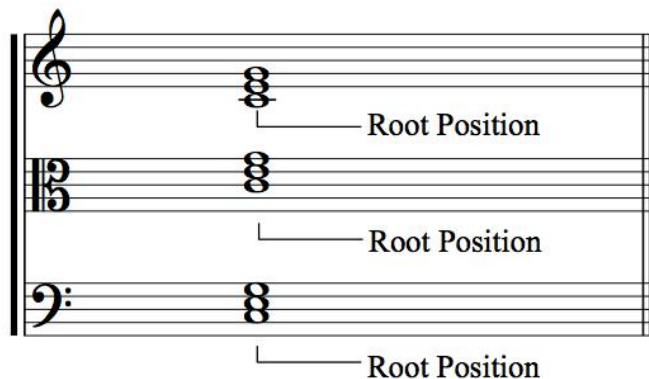
Visit [www.vtmusic.ca](http://www.vtmusic.ca) and complete the Scale Degree Identification Worksheet 2. To check your work, ask a friend or attend one of the Friday *Theory Club* tutorials.

## 3. Triads

### A. Major Triads

In level IA we learned how a **triad** is a collection of three pitches played simultaneously (harmonic) or in sequence (melodic). **Major triads** are comprised of the first, third, and fifth scale degrees. We call this “spelling a chord”. Triads can also be called **chords** and are used by composers to add musical interest accompanying a melody.

In level IA Major triads were written in what is known as **Root Position**, when 1st scale degree is the bottom note of the triad



### B. Minor Triads

Based on your prior knowledge, and as noted in the section above, triads are the combination of the root, third, and fifth scale degrees. **Minor triads** are no different, except that they will sound different than the major triad with the same root pitch.

Be sure to spend some time listening to the differences in the Aural Skills section of this learning package. You won't be tested on identifying them on paper, only on your ability to hear the difference between major and minor triads.

### C. Inversions

An **Inversion** is when the lowest note in the triad is the 3rd or 5th scale degree. When the 3rd scale degree is on the bottom, we call it a **1st Inversion**. When the 5th scale degree is on the bottom, we call it a **2nd Inversion**.

The image displays three rows of musical staves, each representing a different clef: Treble (top), Alto (middle), and Bass (bottom). Each row shows three chord positions: Root Position, First Inversion, and Second Inversion. The notes are arranged in a 3-note chord structure. Labels with arrows point to each position in each row.

### Activity

- 1) Sing the figures notated in the example above. This will help your ear training and make it easier for you to identify what pitch you are playing in a given chord.
- 2) Visit [www.vtmusic.ca](http://www.vtmusic.ca) and complete the Triad Inversion worksheet. To check your work, ask a friend or attend one of the Friday *Theory Club* tutorials.
- 3) Visit the website below and follow the links to the online lesson. Once you've completed the lesson, you can test yourself using the exercise trainer.

<http://www.musictheory.net/lessons/42>

### 4. Intervals

An **interval** is the distance between two pitches. In Theory Package IA we looked at whole tones and semitones; these are examples of the smallest distance between two pitches or smaller intervals. In Theory Package IB, you learned how to identify all major and perfect intervals as they are written and now you'll be asked to identify them aurally (by listening).

**N.B.** Be very thorough in your study of this section. This information will be very helpful in preparing you to hear the different intervals.

In determining the size of the interval, we measure the distance from the first pitch to the second pitch.

The image shows a single musical staff with a treble clef. Two whole notes are placed on the staff: the first note is on the second line (labeled 'First Note') and the second note is on the third line (labeled 'Second Note'). A horizontal bracket is drawn below the two notes, with the text 'Measure the distance' centered underneath it.

In naming intervals we use two words. The first word determines the *quality*, and the second word determines the *interval*.

The image displays three staves of musical notation in 4/4 time, illustrating various intervals. Each staff starts with a middle C (C4) and moves up or down by the specified interval. The intervals shown are: Major 2nd (Maj2), Major 3rd (Maj3), Perfect 4th (P4), Perfect 5th (P5), Major 6th (Maj6), Major 7th (Maj7), and Perfect 8th (P8). The intervals are labeled below each pair of notes on each staff.

### Guide to Naming and Identifying Major/Perfect Intervals

Name of Interval	Common Melody
Perfect Unison	It's the SAME pitch
Major 2nd	"Happy Birthday"
Major 3rd	"Oh when the Saints"
Perfect 4th	"Here Comes the Bride"
Perfect 5th	"Twinkle, Twinkle Little Star"
Major 6th	"My Bonney Lies Over the Ocean"
Major 7th	<i>Will be discussed in class!</i>
Perfect Octave	<i>Will be discussed in class!</i>

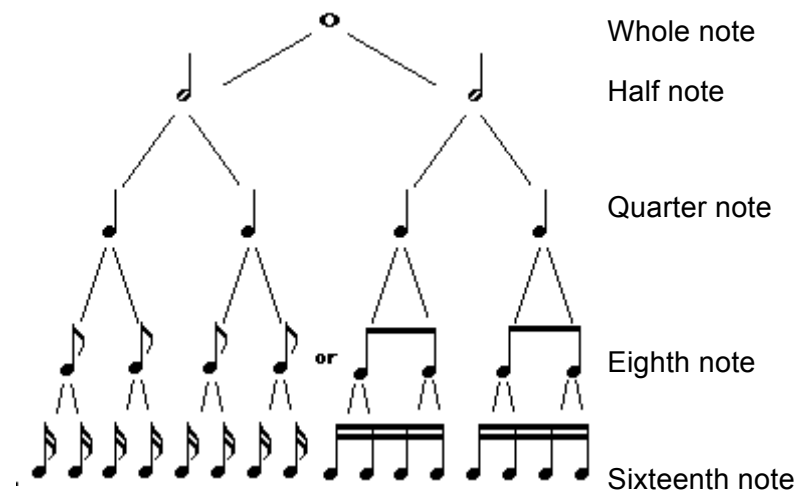
### Activity

1) Visit [www.vtmusic.ca](http://www.vtmusic.ca) and complete the Interval Identification worksheet. To check your work, ask a friend or attend one of the Friday *Theory Club* tutorials.

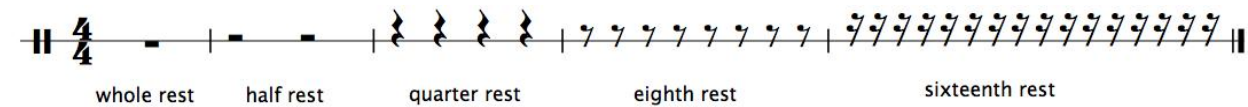
## 5. Rhythm

Rhythm is the manner in which sounds are organized. The **duration**, or value, of each note or rest must reflect **rhythmic accuracy** by individuals so that different musicians performing different parts maintain strong **rhythmic integrity**.

In level 1A we learned that notes have relationships to each other in the same way as fractions. For example, eight 'eighths' OR four 'quarters' OR two 'halves' will make one 'whole'. We use the same words to describe note and rest values.



Similarly, rests have the same relationship as illustrated above. Observe in the example below the rests shown in sequence from whole rest to sixteenth rest.



### A. Dotted Note Values

A dotted note is a note held for a longer duration than usual. The dot represents **adding** half the rhythmic value of the note. For example a dotted half note can be considered as equal to the duration of ONE half note PLUS ONE quarter note totaling an equivalent of THREE quarter notes. This same formula applies to rests as well.

$$\text{Dotted whole note} = \text{Whole note} + \text{Half note}$$

$$\text{Dotted half note} = \text{Half note} + \text{Quarter note}$$

$$\text{Dotted quarter note} = \text{Quarter note} + \text{Eighth note}$$



We tend to have common rhythmic pairings of dotted rhythms, an example of this is a dotted quarter and an eighth note pairing. These rhythmic pairings are common in most musical literature such as marches, waltzes, symphonies. Students should become familiar with these patterns as a form of “rhythmic vocabulary”. Here is an example of a dotted quarter and an eighth note passage.

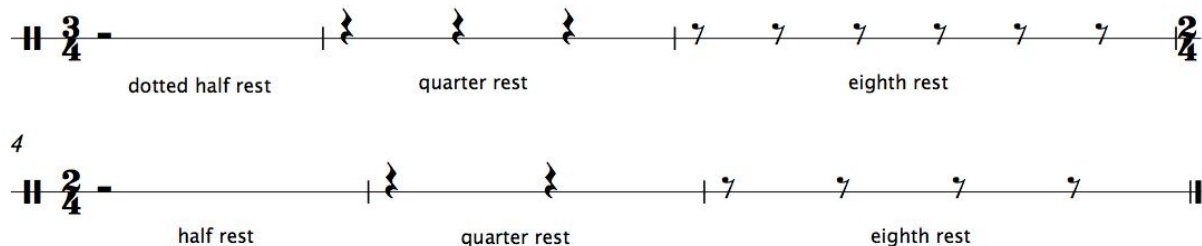


### B. Time Signatures

The **time signature** identified in the example above is an important aspect of organizing music. The two numbers provide different information for us. The top number (*numerator*) tells us how many beats are in a single bar or measure. The bottom number (*denominator*) tells us what note value gets one beat.

To easily read a time signature, simply say it like a fraction. For example, a measure with a time signature of 3/8 consists of *three eighths*.

In IA we looked at 4/4 time. Now let’s look at 3/4 and 2/4 time signatures.



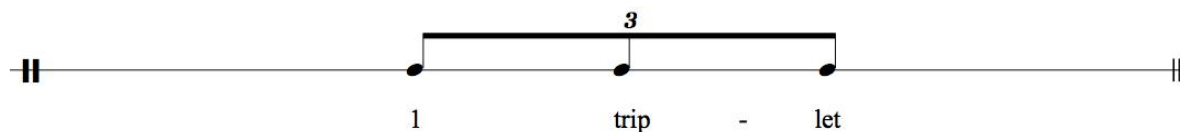
**N.B.** Whole rests are used to indicate an entire bar of rest no matter what the time signature may be. In 3/4, 4/4, 2/4, or any other time signature the whole rest is a **whole bar of rest**.

### C. Counting System

Different musicians rely on different systems of counting their music. As a developing musician, you may have organized a way to count that brings you success. For the purpose of being able to communicate consistently amongst student-musicians at Van Tech, the following are examples of the counting system we will use to represent:

- 
- duration of notes that sound
- duration of rests
- subdivision of each beat

**Subdivision** is when a beat is divided into smaller pieces. For example, when counting a beat as a quarter note, a pair of eighth notes divide a beat into halves. Similarly, sixteenth notes divide a beat into quarters. **Triplets** are notes that are used when a beat is divided into thirds.



It is absolutely true that the first beat in any measure of music will be represented by '1'. Look at the following examples as you come to understand the rules listed below.

Four musical examples in 4/4 time, each with a counting pattern below it:

- Example 1: 1+2+3+4+, 1+2+, 3+4+, 1+ 2+, 3 + 4+, 1 +2 + 3+ 4+
- Example 2: 1+ (2+ 3+) 4 +, 1+2+ (3+4+ 1+) 2+ (3+) 4 +, (1+) 2+ 3+ (4+)
- Example 3: 1 e + a (2+) (3+) 4 +, 1 + (2+) 3 e + a (4+) (1+) (2+) 3 + 4 +
- Example 4: 1 + 2 + 3 +4+, 1 + 2 trip-let 3 + 4 trip-let 1 e + a 2 + 3 + 4 +

**Rule 1 - Duration of Notes that Sound**

- Use a regular (or larger) sized number or '+' symbol to identify beat or part of a beat on which the note begins to sound.
- Use smaller numbers or '+' symbols to identify that the note continues to sound until the end of its value.

**Rule 2 - Duration of Rests**

- Use parentheses to surround numbers or '+' symbols to identify the full duration of a rest.

**Rule 3 - Subdivision of Each Beat**

- In every measure, each eighth must be indicated by a number of '+' symbol to ensure that no part of a measure was left out.
- If a passage of music uses sixteenth notes or sixteenth rests, you must use the '1 e + a' pattern of counting.

## **Activity**

Visit [www.vtmusic.ca](http://www.vtmusic.ca) and complete the Rhythmic Analysis worksheet. To check your work, ask a friend or attend one of the Friday *Theory Club* tutorials.

## **6. Aural Skills**

For each of these areas of learning, it is very important you spend time practicing using the online training activities. Aural Skills are the key to discovering important musical information independently. Just like your ability to read and listen to language, the ability to identify and understand the music you are hearing will help you be a better musician!

### **A. Scales - Major & Natural Minor**

This activity will provide you with an opportunity to hear and identify the difference between major and minor triads. This is exactly how the examination will work. Visit [vtmusic.ca](http://vtmusic.ca) to access the link to the Scale Trainer at MusicTheory.net. The trainer has been customized to replicate exam questions.

### **B. Triads - Major & Minor**

This activity will provide you with an opportunity to hear and identify the difference between major and minor triads. This is exactly how the examination will work. Visit [vtmusic.ca](http://vtmusic.ca) to access the link to the Triad Trainer at MusicTheory.net. The trainer has been customized to replicate exam questions.

### **C. Intervals - Major & Perfect**

This activity will provide you with an opportunity to hear the intervals and identify the correct name of that interval. This is exactly how the examination will work. Visit [vtmusic.ca](http://vtmusic.ca) to access the link to the Interval Trainer at MusicTheory.net. The trainer has been customized to replicate exam questions.

### **D. Rhythm Identification**

The ability to identify a rhythm that is being played for you is an effective way to ensure that musicians understand rhythmic relationships, patterns, and values. This skill is useful for identifying the music you are hearing. If a musician should ever become 'lost' in the music and unsure of when to jump back in, the ability to identify the rhythm being heard will provide a means for getting back on track.

The strategy for practicing this skill area is to listen carefully to the division of each beat within each two-bar sample. The samples you'll be given will always be played three times. A helpful approach is to...

- use the first time through to analyze the first measure
- use the second time through to check the the first measure and analyze the second measure
- use the third time to check both measures and make your selection

You'll quickly recognize that this skill area combines aural skills and your ability to read the rhythm. It will be very important to practice this complex skill with a friend or partner. The activity sheet gives you sample rhythms that will be used on the examination.

### **Activity**

Visit [www.vtmusic.ca](http://www.vtmusic.ca) and for all the links to the online activities and sample questions for Rhythmic Identification. As always, help is available to at any one of the Friday *Theory Club* tutorials.

## **7. Italian Terms**

Communicating in a common language is an important aspect of musicianship. Composers and performers use an efficient system of expressive terms when describing music or providing instructions for how the music should be interpreted. Most often, these terms are provided in Italian. Some composers like Mahler, Grainger, or Debussy are known to use German, English, and French terms. The list below will be tested on the Level IIA Examination.

### **A. Tempo**

#### **Italian Term**

*a tempo*  
*tempo*  
*Grave*  
*Lento*  
*Largo*  
*Adagio*  
*Andante*  
*Moderato*  
*Allegro*  
*Vivace*  
*Presto*  
*L'istesso tempo*  
*Accelerando*  
*Ritardando*  
*Rallentando*  
*Mosso*

#### **English meaning**

return to the original tempo  
speed (beats per minute)  
slow and solemn  
slowly  
broadly  
slow and stately  
at a walking pace  
moderately  
lively and quick  
fast  
very fast  
the same tempo  
gradually faster  
gradually slower  
suddenly slower  
motion

### **B. Dynamics**

#### **Italian Term**

*pianissimo*  
*piano*  
*mezzo piano*  
*mezzo forte*  
*forte*  
*fortissimo*  
*crescendo*  
*decrescendo*  
*diminuendo*  
*sforzando*

#### **English meaning**

very soft  
soft  
medium soft  
medium strong  
strong  
very strong  
gradually stronger  
gradually softer  
diminishingly  
with sudden emphasis

### **C. Style**

#### **Italian Term**

*ad libitum*  
*agitato*

#### **English meaning**

at liberty  
agitated

<i>alla marcia</i>	like a march
<i>animato</i>	animated
<i>appassionato</i>	with passion
<i>cantabile</i>	in a singing style
<i>con brio</i>	with life
<i>con forza</i>	with force
<i>con spirito</i>	with spirit
<i>calme</i>	calm
<i>dolce</i>	sweetly
<i>espressivo</i>	expressively
<i>grandioso</i>	grandly
<i>grazioso</i>	gracefully
<i>leggiero</i>	lightly
<i>maestoso</i>	majestically
<i>pastorale</i>	pastoral
<i>pesante</i>	weighted

#### D. Technique

##### **Italian Term**

*pizzicato*  
*arco*  
*legato*  
*marcato*  
*staccato*  
*tenuto*

##### **English meaning**

strings are plucked  
strings are bowed  
smoothly; connected  
well marked  
separated  
held

#### D. General Use

##### **Italian Term**

*tutti*  
*solo*  
*solì*  
*sempre*  
*con*  
*senza*  
*molto*  
*troppo*  
*non*  
*meno*  
*piu*  
*poco a poco*  
*simile*  
*subito*  
*ma*

##### **English meaning**

all; together  
for one performer  
for all  
always  
with  
without  
much, very  
too much  
not  
less  
more  
little by little  
in the same manner  
suddenly  
but

#### E. Form

##### **Italian Term**

*attacca*  
*dal segno*  
*da capo*  
*coda*  
*fine*  
*tacet*  
*G.P.*  
*caesura*

##### **English meaning**

begin the next section at once  
from the sign  
the beginning  
ending  
the end  
silent; nothing to play in this section  
general pause  
pause