



Welcome Composer!

Welcome Composer! Are you up to the challenge of creating the musical score for some of the latest Video Games and Animated Movies being created right here in British Columbia.

By following these materials, you will:

- *gain a sense of what it's like to be a musician working to create music for games and movies,*
- *learn the various processes that creators go through as they encounter new projects, and;*
- *gain a better understanding of how the things you're learning in school apply in the creative tech industry.*

Composition is an open-world adventure, driven by improvisation and experimentation.

As you explore the realms of Rhythm, Tempo, Harmony, Melody and Texture & Timbre, you will discover new tools to upgrade the arsenal that make up your composers resource kit. If ever you feel stuck in progressing on your quest, simply respawn with a new idea! Advanced and seasoned musicians will be challenged by the many Side Quests along the path to your finished product.

Look out for the following icons along your journey.



The Briefing:

This is where you will receive your contract and be informed about the parameters of your mission



In the Field:

Follow the links for inspiration and examples by professionals from around the web.



Testing Grounds:

This is where you spend most of your time, trying out your newly acquired skills. This place is free from judgement, where you can freely explore, make mistakes, revise and restart, as you feel necessary. Take time to reflect on and evaluate your product.



Side Quests:

Keep an eye out for Side Quests that offer extra challenges and learning rewards.



Industry Voice:

These short video clips let you know how professionals working in the industry think about a particular area of music and how they apply it in their everyday work. You'll see that not everyone thinks or works the same way - but this is fine! It's what makes creativity so exciting.



Resources:

Here you can find links to websites that can help you to experiment and test out your new knowledge.



The Briefing:

Rhythm is the arrangement of sound and silence over time. When composing a piece of music, your rhythm choices can have a wide effect on the emotion, direction, and overall feel of a piece of music. Rhythms can be simple or complex, repetitive or changing. When writing for multiple instruments, your rhythms do not have to be the same; rhythm can be layered.

While often the rhythm is thought about as percussion, your other instruments will also use rhythm to change how they are performed.



In the Field:

Listen to the following clips of compositions where rhythm plays an important role:
Gustav Holst: [The Planets, Mov't I: Mars, the Bringer of War](#)



Junior Testing Grounds:

Visit the Chrome Music Lab and try out the rhythm machine. Experiment by adding many sounds or fewer sounds and think about how it feels as you make changes.

[Chrome Music Lab Rhythm \(https://musiclab.chromeexperiments.com/Rhythm/\)](https://musiclab.chromeexperiments.com/Rhythm/)

Senior Testing Grounds:

Visit Groove Pizza and build a rhythm pattern that fits the theme of your chosen clip.

[Groove Pizza \(https://musedlab.org/groovepizza\)](https://musedlab.org/groovepizza)



Resources

What is MIDI? - [Wikipedia](#)

What is a DAW? - [Wikipedia](#)



Side Quest:

Export the information of the rhythm pattern created with Groove Pizza as a MIDI file, and import it into another DAW, for example Garageband, Band lab, or Ableton, for you to keep working on it!



The Briefing:

Tempo is the frequency or speed of the strong beat in music. Tempo is usually constant and ranges from slow to fast. The melody in a song may be influenced by the tempo, and can vary the effect of rhythm. In certain contexts, it is appropriate to change the tempo of a song to change the mood or emotion.



In the Field:

Composers sometimes experiment with different tempos when creating a composition. In a modern context these are defined by a BPM (beats per minute). Listen to the following clips of composition with varied tempo, how does the tempo affect the feel and emotion of the music?

[Sabre Dance - Aram Khachaturian](#) (Approximately 177bpm)

[All You Need is Love - The Beatles](#) (Approximately 100bpm)

[La Mélancolie Viennoise - Dee Yan-Key](#) (Approximately 60bpm)



Junior Testing Grounds:

Find a song you like on the [YouTube Pitch Changer](https://www.youtube-pitchin.me/) (<https://www.youtube-pitchin.me/>), try increasing or decreasing the tempo. How does this change the way the rhythm sounds? Why would you want to use a slower or faster tempo?

Senior Testing Grounds

Create a rhythm on Groove Pizza (<https://musedlab.org/groovepizza>) and use the sliding tempo scale to change the tempo of your rhythm. How does this change the way the rhythm sounds? Why would you want to use a slower or faster tempo?



Resources

Search [Google Metronome](#) - A perfect click creator.

[BPM Online](http://www.beatsperminuteonline.com/) (<http://www.beatsperminuteonline.com/>) - Allows you to tap a tempo and get a close BPM number.



The Briefing:

Melody is the arrangement of single notes in sequence. Melodies can be simple, complex, or repetitive. Melody can move in steps, skips, and leaping motion. The harmony or chords of a song can lead the melody, or the melody can lead the harmony or chords.

Melody is often the most recognizable part of the music.



In the Field:

Listen to the following clips of composition where melody plays an important role. How do these melodies make use of repetition, steps, or leaps?

[Super Mario World - Overworld Theme](#)

[William Tell Overture - Gioachino Rossini](#)

[Eine Kleine Nachtmusik - Mozart](#)



Testing Grounds:

- ▼ On [BeepBox](https://www.beepbox.co/) (<https://www.beepbox.co/>) or Flat.io (<http://Flat.io>), create a one bar melody which is moving in mostly upward motion.
- ▼ On [BeepBox](https://www.beepbox.co/) or Flat.io, create a one bar melody which is moving in mostly downward motion.
- ▼ Repeat these steps over two and four measures.



Resources

[Random Melody Generator](https://scratch.mit.edu/projects/2353955/) (<https://scratch.mit.edu/projects/2353955/>)



Side Quest:

Characters can have their own unique melodic themes-think Darth Vader, or Super Mario. These smaller melodies which return whenever we see the character are referred to as **motifs**.

Create a **motif** to be used throughout the game or animation!



The Briefing:

Harmony is two or more pitches sounding simultaneously. Harmony can be a result of having two simultaneous melodies; melody and countermelody. Stacking notes to sound simultaneously to create chords is another application of harmony. Melody moves horizontally, whereas harmony moves vertically when two or more notes sounding simultaneously. The harmony can dictate how the melody functions in a song, and a melody can influence how the harmony functions.



In the Field:

Some composers choose to write melodies before their harmony, whereas other composers choose to plan out their harmony before writing a melody. Here is an example of music where harmony plays an important role:
[Samuel Barber - Adagio for Strings](#)



Junior Testing Grounds:

On <https://chordchord.com>, use the arpeggio and drum presets to create your own chord progression.

Using [Chrome Music Lab Chords](https://musiclab.chromeexperiments.com/Chords/) (<https://musiclab.chromeexperiments.com/Chords/>) listen to different Major and Minor Chords. How are major and minor chords different?

Senior Testing Grounds:

Using [Musical Chord Progression Arpeggiator](#) on Codepen.io, change the mode settings to Ionian and create a chord progression. Find the arpeggio you like most and set up the chords in an order that sounds best to you.



Resources

[Musical Chord Progression Arpeggiator](#) - Codepen.io

4 bars, piano chord generator - <https://chordchord.com>

Guitar chord builder (8 chords) - https://www.drumbot.com/projects/key_chords/



Side Quest:

Once you have built a chord progression, compose a melody mainly using notes that make up each of the chords.



The Briefing - Texture:

Texture is the simultaneous layering of sounds. Texture can refer to rhythm, harmony, or a hybrid of both rhythm & harmony. We think of texture as being a continuum; dense to sparse, active to still, and thick to thin. Adding more instruments will add density and thickness to the texture, whereas taking instruments out will create thin and sparse texture.

The Briefing - Timbre:

Timbre is the characteristic quality of a sound, without taking pitch and dynamics into account, looking at the sound's tone colour. Many instruments have different timbres which they can produce. Timbre is also thought to be a continuum moving from light to dark, and warm to cold. Choosing an instrument's timbre can convey the attributes of a character, emotion, place or mood.



In the Field:

Listen to the following clips of compositions where texture and timbre plays an important role. [Boléro M. 81, London Symphony Orchestra](#)



Junior Testing grounds - Texture:

[Bobby McFerrin 'Don't Worry, Be Happy'](#)

- Try adding more layers or take layers away to see how the texture of the song is affected.

Senior Testing Grounds - Texture:

[BeepBox](#) - Create a melody then include more layers to add a thicker texture.

Junior Testing Grounds - Timbre :

[Oscillators \(https://musiclab.chromeexperiments.com/Oscillators/\)](https://musiclab.chromeexperiments.com/Oscillators/):

switch between the characters and listen how each one has a different timbre.

Senior Testing Grounds - Timbre:

[BeepBox \(https://www.beepbox.co/\)](https://www.beepbox.co/):

Rate the Waveforms from darkest and lightest, or warmest to coldest.