



DigiBC's mission is to ensure that Interactive and Digital Media (IDM), as a cornerstone of the broader technology ecosystem, grows and thrives in the province for the benefit of current and future generations. As part of our goal to help ensure that our industry has the talent it needs to continue to grow and thrive, DigiBC is working with the Ministry of Arts and Culture and the Ministry of Education to develop programs that will help young people see the opportunities in pursuing a career in digital creativity.

The messaging we will advance throughout this competition is that the Creative Industry Sector is a fantastic industry to work in and is a viable career path. We hope to invite BC's young people to imagine themselves entering the Creative Industries - as a musician, a producer, a coder, an artist, you name it. We want to invite them in.

British Columbia has a world-leading digital media industry and every video game/animation is accompanied by a soundtrack. We have developed these materials to provide students with a theory of music toolbox which they can apply to themes and visuals found in video games and animated movies.

How does music factor into Video Games and Animation?

- Emotional context
- Key scenes and moments

We have chosen **five key topics**:

Rhythm, Harmony, Melody, Tempo, Texture and Timbre.

For each topic we have provided a related student (referred to as 'composer') guide and activity worksheet to inform the considerations required when composing an original score.

Through the completion of these lessons and activities, we have endeavoured to allow students to explore many core core competencies found in the Arts and Music 8-12 Curriculum. These include but are not limited to the outlines listed below.

We sincerely hope you and your students enjoy these activities and experimenting with composition for animation and video games!



## Arts Education 8

### Exploring & Creating

- Intentionally select and apply materials, movements, technologies, environments, tools, and techniques by combining and arranging artistic elements, processes, and principles in art making
- Create artistic works collaboratively and as an individual using ideas inspired by imagination, inquiry, experimentation, and purposeful play

### Reasoning & Reflecting

- Respond to works of art using one's knowledge of the world
- Interpret works of art using knowledge and skills from various areas of learning
- Develop, refine ideas, and critically appraise ideas, processes, and technical skills in a variety of art forms to improve the quality of artistic creations

### Communicating & Documenting

- Adapt learned skills, understandings, and processes for use in new contexts and for different purposes and audiences
- Take creative risks to express feelings, ideas, and experiences
- Experience, document, choreograph, perform, and share creative works in a variety of ways
- Describe, interpret and respond to works of art

## Music 9

### Exploring & Creating

- Create artistic works both collaboratively and as an individual using ideas inspired by imagination, inquiry, and purposeful play
- Explore materials, environments, tools, and techniques by combining and arranging elements, processes, and principles
- Select and combine elements and principles of the arts to intentionally create a particular mood, effect, or meaning

### Reasoning & Reflecting

- Describe, interpret, and evaluate how artists use tools, processes, technologies, materials, and environments to create and communicate ideas
- Develop, refine, document, and critically appraise ideas, processes, and technical skills to improve the quality of works of art



**Communicating & Documenting**

- Adapt and apply learned skills, understandings, and processes for use in new contexts and for different purposes and audiences
- Compose, interpret, and expand ideas using symbolism, imagery, and elements
- Revise, refine, analyze, and document creative works and experiences to enhance presentation and/or performance in a variety of ways

**Connecting and Expanding**

- Take creative risks to experience and express thoughts, emotions, ideas, and meaning

**Contemporary Music 10**

**Exploring & Creating**

- Express meaning, intent, and emotion through music
- Improvise and take creative risks in music
- Develop and refine relevant technical skills and expressive qualities

**Reasoning & Reflecting**

- Consider the function of their instrument, voice, or role within an ensemble or collaborative effort
- Analyze styles of music to inform musical decisions
- Describe and analyze musicians' use of technique, technology, and environment in music composition, arranging, and performance, using musical language

**Communicating & Documenting**

- Use discipline-specific language to communicate ideas
- Document, share, and appreciate musical works and experiences in a variety of contexts

**Connecting and Expanding**

- Use technical knowledge and contextual observation to make musical decisions



## Contemporary Music 10

### Exploring & Creating

- Express meaning, intent, and emotion through music
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### Reasoning & Reflecting

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### Communicating & Documenting

- Use discipline-specific language to communicate ideas
- Document, share, and appreciate musical works and experiences in a variety of contexts

### Connecting and Expanding

- Use technical knowledge and contextual observation to make musical decisions

## Contemporary Music 11

### Exploring & Creating

- Express meaning, intent, and emotion through music
- Develop and refine technical and expressive skills

### Reasoning & Reflecting

- Analyze and interpret musicians' use of technique, technology, and environment in musical composition, arranging, and performance, using musical language
- Consider the function of their instrument, voice, or role within an ensemble or collaborative effort
- Analyze styles of music to inform musical decisions

### Communicating & Documenting

- Document and share musical works and experiences in a variety of contexts
- Anticipate individual responses to a piece of music
- Express personal voice, cultural identity, perspective, and values in musical study and performance



### **Connecting and Expanding**

- Demonstrate understanding of creative processes
- Explore and relate musical selections to personal, social, or cultural issues
- Use technical knowledge and contextual observation to make musical decisions

## **Contemporary Music 12**

### **Exploring & Creating**

- Improvise and take creative risks in music
- Adapt and refine technical and expressive skills

### **Reasoning & Reflecting**

- Analyze and interpret musicians' use of technique, technology, and environment in musical composition, arranging, and performance, using musical language
- Consider the function of their instrument, voice, or role within an ensemble or collaborative effort
- Analyze styles of music to inform musical decisions

### **Communicating & Documenting**

- Use musical vocabulary to respond to music
- Anticipate audience responses to a piece of music
- Collaborate to express personal voice, cultural identity, and perspective through music

### **Connecting and Expanding**

- Demonstrate personal and social responsibility associated with creating, performing, and responding to music
- Combine technical knowledge, musical literacy, and contextual observation to make musical decisions



**Definition:** The arrangement of sounds and silences over time.

**Rhythm can be:**

- Simple
- Complex
- Repetitive

**Discussion points:**

- Effect on mood/feel
- Can be layered
- Matches the tempo

**Examples:**

- 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](#)

**Activity:**

- Create and perform your own simple rhythm pattern
- Create and perform your own complex rhythm pattern
- Create multiple layers of rhythms (using Groove Pizza)

**Resources:**

- [Groove Pizza](https://apps.musedlab.org/groovepizza/) - <https://apps.musedlab.org/groovepizza/>
- [Chrome MusicLab Rhythm](https://musiclab.chromeexperiments.com/Rhythm/) - <https://musiclab.chromeexperiments.com/Rhythm/>



**Definition:** The frequency or speed of the beat.

**Tempo can be:**

- Slow
- Fast
- Changing

**Discussion points:**

- Influences the effect of rhythms
- May influence changes in the melody

**Examples:**

- [Sabre Dance - Aram Khachaturian](#) (Approximately 177bpm)
- [All You Need is Love - The Beatles](#) (Approximately 100bpm)
- [La Mélancolie Viennoise - Dee Yan-Key](#) (Approximately 60bpm)

**Activity:**

- Play your rhythms at varying tempos (ex: 60/90/144BPM)

**Resources:**

- Search the keyword “metronome” in Google to find a functional one



**Definition:** The arrangement of single notes in sequence.

**Melody can be:**

- Simple
- Complex
- Repetitive

**Discussion points:**

- Motive/motif
- Phrases
- Can often be the most recognizable part of the composition
- Moves by steps/skips/leaps
- Can lead the harmony or be led by the harmony

**Examples:**

- [Super Mario World - Overworld Theme](#)
- [William Tell Overture - Gioachino Rossini](#)
- [Eine Kleine Nachtmusik - Mozart](#)

**Activity:**

- Write a string of notes where the overall direction is upwards (over 1 measure, 2, and 4 measures).
- Write a string of notes where the overall direction is downwards (over 1 measure, 2, and 4 measures).

**Resources:**

- Web Based Music Notation - <http://Flat.io>
- BeepBox (Chiptune Creator) - <https://beepbox.co>
- Bandlab (Web based DAW) - <http://www.bandlab.com>



**Definition:** Two or more pitches sounding simultaneously.

**Harmony can be:**

- Used to build a chord progression
- A result of two simultaneous melodies (melody and counter melody)

**Discussion points:**

- Whereas melody moves horizontally, harmony is the vertical component (stacked notes)
- Choices in harmony may require changes to your melody and vice-versa

**Examples:**

- [Samuel Barber - Adagio for Strings](#)

**Activity:**

- Write two melodies and play them back simultaneously
- Use one of the generators below (such as Chord Chord) to create a chord progression to convey a mood/character/emotion

**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/](https://www.drumbot.com/projects/key_chords/)



**Definition:** The characteristic quality of a sound independent of pitch and dynamics; tone colour.

**Texture can be:**

- Bright to dark, soft to hard, warm to cold, etc

**Timbre can be:**

- Dense to sparse, thick to thin, active to still
- Layered (may be made up of a combination of melody, harmony, rhythm)

**Discussion points:**

- The choice of instrument timbre can be used to convey the attributes of a character, emotion, place or mood.
- Many instruments have more than one timbre they can produce
- Changing the number of instruments changes the density of the texture, more instruments = thicker, and less instruments = thinner.

**Examples:**

- Texture: Bolero

**Timbre Activity:**

- Instrument Colour Worksheet: assigning colours to each instrument as heard
- BeepBox: Rate the Waveforms in terms of darkest and lightest

**Texture Activity:**

- Worksheet: vocab to texture (ie. How to convey isolation, thick or thin)

**Resources:**

- <https://musiclab.chromeexperiments.com/Oscillators/>
- <https://www.beepbox.co/>