

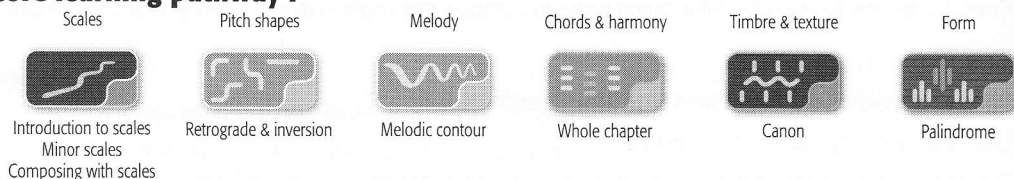
# Teacher Guide F: Palindromes and canons

## Aims & Objectives

Students will:

- Experience the techniques of creating palindromes and canons.
- Create a melody with good contour that can be used as the basis for a palindrome or canon.
- Create a harmonization that can be used as the basis for a palindrome or canon.
- Explore how to construct palindromes and canons from melodies and other aspects of a composition.

## Core learning pathway F



## Recommended listening

- Byrd, *Diliges Dominum*
- Schubert, *Die Zauberharfe*
- Webern, Symphony Op. 21
- Handel, *Amen* chorus from *Messiah*
- Bartók, *Mikrokosmos*
- Steve Reich, *Piano Phase* (1967) and *Clapping Music* (1972)

## Core composing projects

Students can then go on to complete one or more of the following options:

- **F1: Palindromes**
  - Create a composition that has a palindrome melody as its basis.
  - Create a composition that has a palindrome harmonization as its basis.
- **F2: Canon**
  - Create a composition using a canon for 2–3 instruments.
  - Create a composition around a canon that includes augmentation and diminution for 2–3 instruments.

## Extension work

### Extension learning pathway



### Extension composing projects

#### F1: Palindromes

In either i or ii distribute the bass line between different instruments, possibly using augmentation or diminution.

#### F2: Canon

Include in either i or ii a free polyphonic section.

# Student learning pathway F: Palindromes and canons








## Your goal

To develop an understanding of palindromes and canons so that you can create an original composition using these techniques.

## Core work





Follow the core learning pathway through the chart below, exploring the concepts together with their related activities. Save any work you create as a file and write its filename in the space provided.

Test your knowledge with a quiz as you complete each topic and record your score on this sheet.

	Core learning pathway	Relevant information and tasks	Quiz score	✓
Scales 	<ul style="list-style-type: none"> <li>Intro to scales ④</li> <li>Minor scales ⑧</li> <li>Composing with scales ⑩</li> </ul>	The starting point for every palindrome or canon is the scale that you use for the melody. Using the Tracker, choose a scale you wish to work with.  Filename:		<input type="checkbox"/>
Pitch shapes 	<ul style="list-style-type: none"> <li>Retrograde &amp; inversion ⑫</li> </ul>	The second half of a palindrome is a retrograde of the first half. An inverted version of the theme is often used in a canon. Using the Tracker, create a palindrome and an inversion of the melody you created earlier.  Filename:		<input type="checkbox"/>
Melody 	<ul style="list-style-type: none"> <li>Melodic contour ⑳</li> </ul>	A strong independent melody is a must for a canon. It is important that it has a good melodic contour. Using the Tracker, compose the opening of a melody using the scale chosen earlier.  Filename:		<input type="checkbox"/>
Chords & harmony 	<ul style="list-style-type: none"> <li>Whole chapter ㉒ – ㉔</li> </ul>	In a strict (simple) canon all voices are dictated by the voice that starts, which limits harmonic freedom. Use the Tracker to create a strict canon and listen to the harmonic result.  Filename:		<input type="checkbox"/>
Timbre & texture 	<ul style="list-style-type: none"> <li>Canon ㉕</li> </ul>	Using the Tracker, create an imitative canon starting with the melody you began earlier.  Filename:		<input type="checkbox"/>
Form 	<ul style="list-style-type: none"> <li>Palindrome ㉖</li> </ul>	It's a challenge to create a palindrome that sounds natural but is mathematically correct. Using the Tracker, create a natural-sounding palindrome.  Filename:		<input type="checkbox"/>
㉗ =  Tracker activity			<b>Total:</b>	

## Extension work

Follow the extension learning pathway through the chart below, exploring its more advanced concepts together with their related activities. Save any work you create as a file and write its filename in the space provided.

	Extension learning pathway	Relevant information and tasks	Quiz score	✓
Pitch shapes 	• Augmentation & diminution ⑮ ⑯	When motifs (motives) or melodies are distributed between several instruments, augmentation or diminution can be used to introduce variety while thickening the overall texture. Use the Tracker to explore this.  Filename:		<input type="checkbox"/>
Rhythm 	• Rhythm up close ②④ ②⑤	Using ties and accents can affect which notes are heard more prominently. Sustain and decay characteristics of the instruments you choose will also have a bearing on this. Use the Tracker to experiment with ties and accents.  Filename:		<input type="checkbox"/>
Melody 	• Sentence construction ③③ – ③⑦ ⑤① ⑥①	Use the Tracker's Arrange window to experiment with different sentence constructions. Notice the effect these have on palindromes and canons that are created from them.  Filename:		<input type="checkbox"/>
? =  Tracker activity		<b>Total:</b>		

# Student composing project F1: Palindromes

## Background

A musical palindrome is a challenge that has appealed to composers for hundreds of years. The difficulty is achieving mathematical accuracy while still making a valid artistic statement. Palindromes can appear in a variety of contexts. Short rhythms through to full orchestral scores have been created using a palindrome. Some composers choose to apply the palindrome to a single aspect of their piece, e.g. harmonic structure, while allowing themselves greater artistic freedom in other aspects.

## Your task

Create a composition that includes a palindrome. Use the Tracker to help you construct and record your composition, always being careful to name your files clearly. Make use of any material you created in Student learning pathway F and refer to any other information pages in Compass that might help you develop your creative ideas.

## Option I

- Choose a scale and a principal instrument for your palindrome.
- Write a melody that does not have a definite ending and experiment with using the Toolbox to make a strict palindrome.
- Unless you want a mathematically perfect palindrome, do not be afraid to slightly adjust some notes or rhythms afterwards in order to achieve more musical sense.
- Use this melody as the main element of the rest of your composition adding accompanying and other melodic parts as you choose.
- Write about how your palindrome is constructed.

## Option II

- Choose an instrument or instruments to play a harmonic progression.
- Create a 16-bar harmonic progression that does not have a definite ending.
- Complete your harmonic progression by using the Toolbox to make a harmonic palindrome.
- Use this progression as the basis for the rest of your composition, creating melodic and accompanying parts within the progression. You may repeat the progression as often as you wish.
- Write about how your palindrome is constructed and how you have used it.

## Extension

- In either i or ii, distribute the bass line between different instruments, possibly using augmentation or diminution.
- Write about what you have done.