

Kenrick Ho

# 12 × 12

For String Quartet

(2019)

12 x 12 – Kenrick Ho

	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
Violin 1	1	2	3	4	5	6	7	8	9	10	11	12
	5	6	7	8	9	10	11	12	1	2	3	4
	9	10	11	12	1	2	3	4	5	6	7	8
Violin 2	2	1	4	3	6	5	8	7	10	9	12	11
	6	5	8	7	10	9	12	11	2	1	4	3
	10	9	12	11	2	1	4	3	6	5	8	7
Viola	3	4	1	2	7	8	5	6	11	12	9	10
	7	8	5	6	11	12	9	10	3	4	1	2
	11	12	9	10	3	4	1	2	7	8	5	6
Cello	4	3	2	1	8	7	6	5	12	11	10	9
	8	7	6	5	12	11	10	9	4	3	2	1
	12	11	10	9	4	3	2	1	8	7	6	5

Preface:

The musical material on the score is generated from the table of numbers above. It is designed similarly to a sudoku, but using 12 numbers instead of 9. There is a unique combination of numbers in each row, column, and in every 4 × 3 box in the table. Horizontally, each column has a pitch assigned to it in chromatic order starting with C4. Vertically, the numbers represent intervals, using semitones as a unit. For example, 1 = minor 2<sup>nd</sup>, 2 = major 2<sup>nd</sup>, 3 = minor 3<sup>rd</sup>, and so on. The notes on the score is found by checking its interval against the pitch assigned in its column. The 4 × 3 boxes map out which instruments play notes.

The vertical order of number in the table is organised in a specific way, so that the sounding result should be four voices each playing similar shaped motifs repeatedly, with a subtle sense of ascending chromaticism.

Duration: 0'30"

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♩ = 120 **fast**

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Violin I  
pizz.  
*f p f p f p f*

Violin II  
pizz.  
*f p f p f p f p*

Viola  
pizz.  
*f p f p f p f*

Violoncello  
pizz.  
*f p f p f p f p*

9 **A**

Violin I  
*p f p f p f p f*

Violin II  
*f p f p f p f p*

Viola  
*p f p f p f p f*

Violoncello  
*f p f p f p f p*

18 **B**

Musical score for measures 18-23. The score is written for four staves: Treble (top), Treble (second), Bass (third), and Bass (bottom). The key signature has one sharp (F#) and the time signature is 3/4. The music features dynamic markings of *f* (forte) and *p* (piano). Measure 18 starts with a piano (*p*) melody in the top staff. Measures 19-23 show a complex interplay of dynamics across all staves, with frequent changes between *f* and *p*. The bottom staff has a melodic line that is mostly silent, with some notes appearing in measures 20 and 23.

24

Musical score for measures 24-29. The score continues from the previous system, using the same four-staff layout. The dynamics continue to alternate between *f* and *p*. Measure 24 begins with a forte (*f*) melody in the top staff. The music concludes with a final measure (measure 29) that is mostly silent across all staves.

Violin I

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♩ = 120 fast

pizz.

Measures 1-8 of the Violin I part. The music is in 2/4 time and D major. It consists of eighth notes with dynamic markings *f* and *p*. The notes are: 1. D4 (f), E4 (p), F#4 (f), G4 (p); 2. A4 (f), B4 (p), C5 (f), D5 (p); 3. E5 (f), F#5 (p), G5 (f), A5 (p); 4. B5 (f), C6 (p), D6 (f), E6 (p); 5. F#6 (f), G6 (p), A6 (f), B6 (p); 6. C7 (f), D7 (p), E7 (f), F#7 (p); 7. G7 (f), A7 (p), B7 (f), C8 (p); 8. D8 (f), E8 (p), F#8 (f), G8 (p).

9 A

Measures 9-16 of the Violin I part. Measure 9 starts with a *p* dynamic. Measure 10 has an accent (>) over the first note. Dynamics are *f* and *p*. The notes are: 9. A4 (p), B4 (f), C5 (p), D5 (f); 10. E5 (f), F#5 (p), G5 (f), A5 (p); 11. B5 (f), C6 (p), D6 (f), E6 (p); 12. F#6 (f), G6 (p), A6 (f), B6 (p); 13. C7 (f), D7 (p), E7 (f), F#7 (p); 14. G7 (f), A7 (p), B7 (f), C8 (p); 15. D8 (f), E8 (p), F#8 (f), G8 (p); 16. A8 (f), B8 (p), C9 (f), D9 (p).

17 B

Measures 17-23 of the Violin I part. Measure 17 starts with a *f* dynamic. Measure 18 has an accent (>) over the first note. Dynamics are *f* and *p*. The notes are: 17. A4 (f), B4 (p), C5 (f), D5 (p); 18. E5 (f), F#5 (p), G5 (f), A5 (p); 19. B5 (f), C6 (p), D6 (f), E6 (p); 20. F#6 (f), G6 (p), A6 (f), B6 (p); 21. C7 (f), D7 (p), E7 (f), F#7 (p); 22. G7 (f), A7 (p), B7 (f), C8 (p); 23. D8 (f), E8 (p), F#8 (f), G8 (p).

24

Measures 24-27 of the Violin I part. Measure 24 starts with a *f* dynamic. Measure 25 has an accent (>) over the first note. Dynamics are *f* and *p*. The notes are: 24. A4 (f), B4 (p), C5 (f), D5 (p); 25. E5 (f), F#5 (p), G5 (f), A5 (p); 26. B5 (f), C6 (p), D6 (f), E6 (p); 27. F#6 (f), G6 (p), A6 (f), B6 (p).

Violin II

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♩ = 120 **fast**  
pizz.

1 2 3 4 5 6 7

*f* *p* *f* *p* *f* *p*

8 9 10 11 12 13 14

*f* *p* *f* *p* *f* *p*

15 16 17 18 19 20 21 22

*f* *p* *f* *p* *f* *p* *f* *p*

23 24 25 26 27 28 29 30 31 32

*f* *p* *f* *p*

Viola

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♩ = 120 **fast**

pizz.

Musical staff 1, measures 1-6. The staff is in 3/4 time with a key signature of one flat. The notes are: 1. quarter note G2 (f), 2. quarter note F2 (p), 3. quarter note E2 (f), 4. quarter note D2 (p), 5. quarter note C2 (f), 6. quarter note B1 (p). There are rests in measures 2, 3, 4, and 5.

Musical staff 2, measures 7-12. Measure 7 starts with a box labeled 'A'. The notes are: 7. quarter note G2 (f), 8. quarter note F2 (p), 9. quarter note E2 (f), 10. quarter note D2 (p), 11. quarter note C2 (f), 12. quarter note B1 (p). There are rests in measures 8, 9, 10, and 11.

Musical staff 3, measures 13-17. The notes are: 13. quarter note G2 (f), 14. quarter note F2 (p), 15. quarter note E2 (f), 16. quarter note D2 (p), 17. quarter note C2 (f). There are rests in measures 14, 15, and 16.

Musical staff 4, measures 18-23. Measure 18 starts with a box labeled 'B'. The notes are: 18. quarter note G2 (f), 19. quarter note F2 (p), 20. quarter note E2 (f), 21. quarter note D2 (p), 22. quarter note C2 (f), 23. quarter note B1 (p). There are rests in measures 19, 20, 21, and 22.

Musical staff 5, measures 24-29. The notes are: 24. quarter note G2 (f), 25. quarter note F2 (p), 26. quarter note E2 (f), 27. quarter note D2 (p), 28. quarter note C2 (f), 29. quarter note B1 (p). There are rests in measures 25, 26, 27, and 28.

Violoncello

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♩ = 120 **fast**  
pizz.

Staff 1: Bass clef, 2/4 time signature. Measures 1-8. Dynamics: *f* *p* *f* *p* *f* *p* *f* *p*. Includes a *pizz.* marking above the first measure.

9 A

Staff 2: Bass clef, 2/4 time signature. Measures 9-16. Dynamics: *f* *p* *f* *p* *f* *p*. Section marker **A** is above measure 9.

17 B

Staff 3: Bass clef, 2/4 time signature. Measures 17-22. Dynamics: *f* *p* *f* *p* *f* *p*. Section marker **B** is above measure 17.

23

Staff 4: Bass clef, 2/4 time signature. Measures 23-28. Dynamics: *f* *p* *f* *p*. Ends with a double bar line.