

# Collatz workout

*For Orchestra in the Shape of a Pear*

Instillation Piece:

for 3-5 consecutive Performers

The scores are to be laid out on 12 stands in the space.  
These are to be laid out as according to the diagram attached.

The performers start on one of the following numbers

[1,2,4,8,5]

and move to the next until  
returning to their original number.  
(i.e players circle anti-clockwise.)

Allegro = 120 bpm

---

Optional performance direction:

Each performer wears headphones connected to a  
personal metronome on the players phone (or mp3 player)

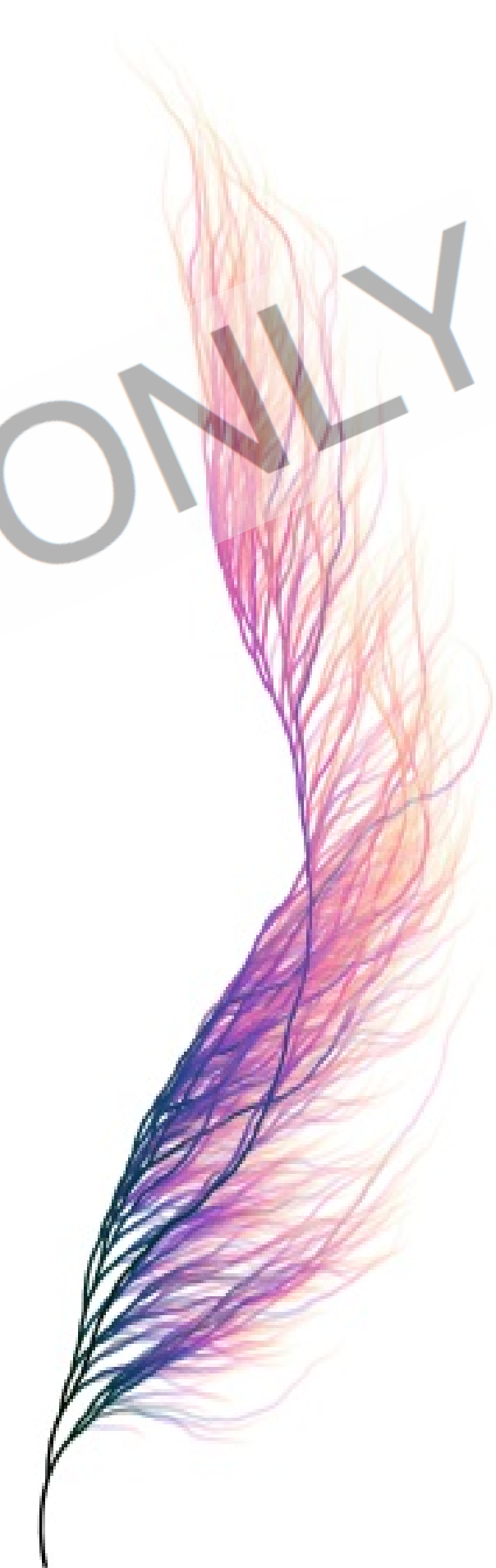
or

Metronome in the middle of the performers.

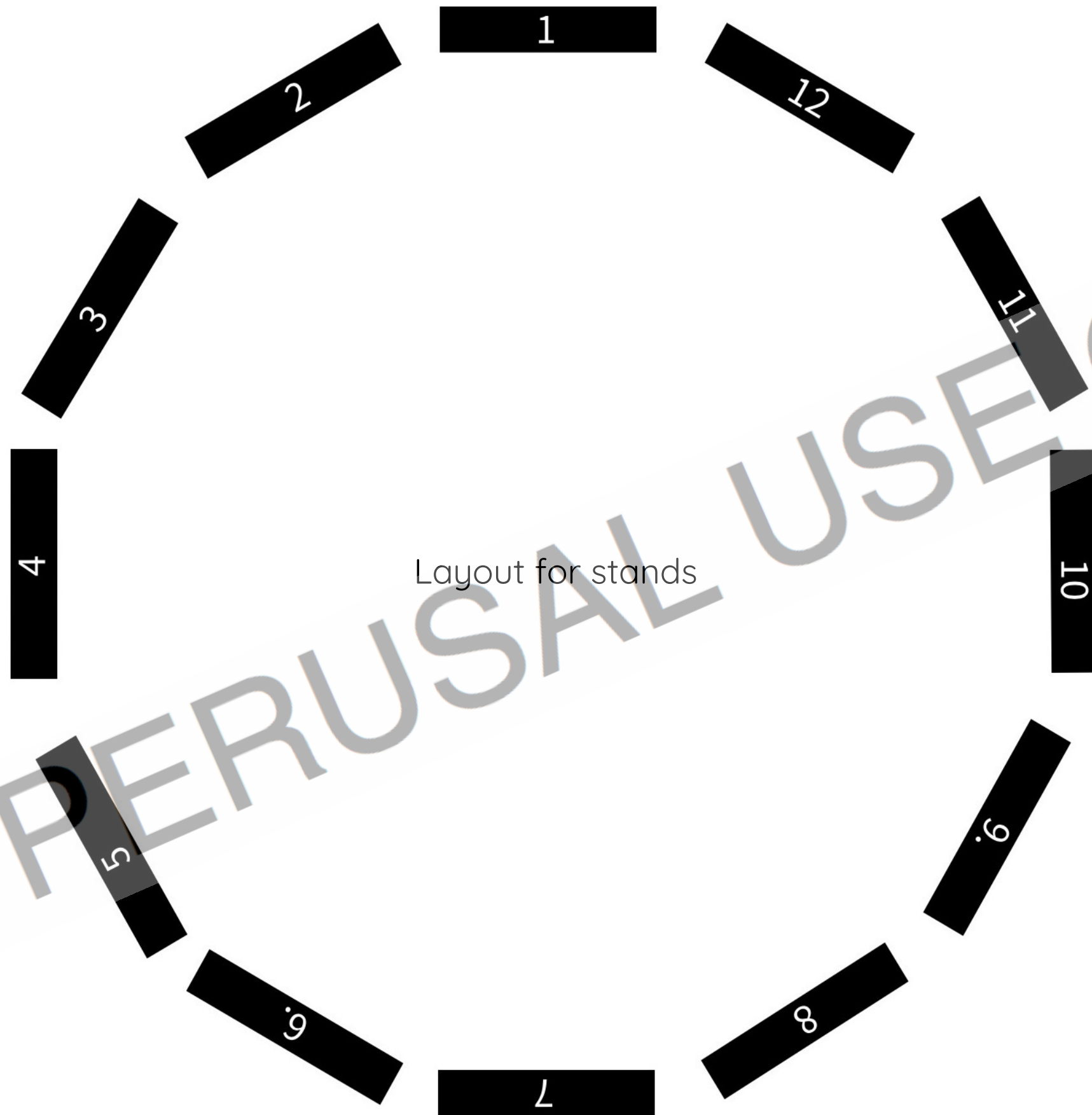
Note. This score is extremely flexible so please contact the composer if you wish for adjustments.

Note. Wind instruments breathe as necessary.

Phillip Matty



FOR PERUSAL USE ONLY



Layout for stands

FOR PERUSAL USE ONLY

	Initial Position				
Player 1	1	2	4	5	8
Player 2	8	5	1	2	4
Player 3	2	4	8	1	5
Player 4	5	8	2	4	1
Player 5	4	1	5	8	2

# Collatz workout

## I

Phillip Matty

**Allegro**  
7 Pompous *f*

**Spritely**  
*f*

**Modest**  
*p*

**Majestic**  
*mp*

**Whimsical**  
*mf*

The musical score is for five players, each with a different character and dynamic. Player 1 starts with a 'Pompous' character at a forte (f) dynamic, playing a sequence of notes with a slur. Player 2 is 'Spritely' at forte (f), playing a more rhythmic, eighth-note pattern. Player 3 is 'Modest' at piano (p), playing a simple, spaced-out melody. Player 4 is 'Majestic' at mezzo-piano (mp), playing a melody with some rests. Player 5 is 'Whimsical' at mezzo-forte (mf), playing a melody with eighth notes and rests. The score is in 4/4 time and ends with a double bar line and repeat dots.

# Collatz workout

## II

**Allegro**

7 Majestic

Player 1 *mf* *f* *mf* *f* *mf*

Modest

Player 2 *p*

Whimsical

Player 3 *f* *mf* *f* *ff* *f* *p*

Spritely

Player 4 *f* *f* *pp* *mf*

Pompous

Player 5 *mp*

The musical score is written for five players in 4/4 time. Player 1's part is marked 'Majestic' and starts with a dynamic of *mf*. It features a series of notes with slurs and accents, with dynamics changing to *f*, *mf*, *f*, and *mf*. Player 2's part is marked 'Modest' and starts with a dynamic of *p*, featuring a series of notes with slurs. Player 3's part is marked 'Whimsical' and starts with a dynamic of *f*. It includes notes with slurs and accents, with dynamics changing to *mf*, *f*, *ff*, *f*, and *p*. Player 4's part is marked 'Spritely' and starts with a dynamic of *f*. It features a series of notes with slurs and accents, with dynamics changing to *f*, *pp*, and *mf*. Player 5's part is marked 'Pompous' and starts with a dynamic of *mp*, featuring a series of notes with slurs.

# Collatz workout

## III

Allegro

1

Player 1

Player 2

Player 3

Player 4

Player 5

The musical score is for five players in 4/4 time. Player 1 starts with a melodic line marked *mf*, moving to *f* and then back to *mf*. Player 2 plays a sustained line of half notes, starting at *mf* and ending at *p*. Player 3 has a more active line, starting at *mf*, moving to *p*, then *pp*, and finally *mf*. Player 4 plays a sparse line of notes, starting at *mf*. Player 5 plays a sustained line of half notes, starting at *mf* and ending at *pp*. A large watermark 'FOR PERUSAL USE ONLY' is overlaid diagonally across the page.

15

Player 1

*mp* *p* *pp*

Player 2

*mf*

Player 3

*p*

Player 4

Player 5

*mf*

22

Player 1

Player 2

Player 3

Player 4

Player 5

*mf* *ff* *mf* *f*

*p*

*mf* *pp* *mf*

*f* *mf* *f*



# Collatz workout

## IV

7 **Allegro**  
Whimsical

Player 1 *f*

**Spritely**

Player 2 *mp* *p* *mp* *mf*

**Majestic**

Player 3 *mf* *mp*

**Modest**

Player 4 *p* *pp*

**Pompous**

Player 5 *f*

# Collatz workout

V

1 **Allegro**  
Modest

Player 1 *p*

Majestic

Player 2 *mf*

Whimsical

Player 3 *mp* *mf* *f*

Spritely

Player 4 *f*

Pompous

Player 5 *f*

The musical score is written for five players in 4/4 time. Player 1 starts with a dynamic of *p* and a tempo of **Allegro** with a **Modest** character. Player 2 has a dynamic of *mf* and a **Majestic** character. Player 3 has dynamics of *mp*, *mf*, and *f* with a **Whimsical** character. Player 4 has a dynamic of *f* and a **Spritely** character. Player 5 has a dynamic of *f* and a **Pompous** character. The score includes various musical notations such as slurs, ties, and rests.

13

Player 1

Player 2

Player 3

Player 4

Player 5

*mf* *mp* *p* *mp* *mf*

*ff* *f* *mf*

# Collatz workout

## VI

1 Allegro

Player 1 *pp*

Player 2 *p*

Player 3 *mp* *mf* *f*

Player 4 *p*

Player 5 *mf* *f*

The musical score is written for five players in 4/4 time. Player 1 starts with a *pp* dynamic and features a melodic line with slurs. Player 2 enters with a *p* dynamic. Player 3 has a more active role, starting with *mp* and increasing to *mf* and *f*. Player 4 and Player 5 provide harmonic support with various dynamics and slurs. The tempo is marked 'Allegro'.

16

Player 1

Player 2

Player 3

Player 4

Player 5

*mf*

*mf*

25

Player 1

Player 2

Player 3

Player 4

Player 5

*pp* *p*

*p* *pp*

*mp* *f* *mf*

*pp* *mp*

*p* *pp* *p* *mp*

# Collatz workout

## VII

1 Allegro

Player 1 *p*

Player 2 *pp*

Player 3 *mf* *mp*

Player 4 *mp* *mf*

Player 5 *mp* *f*

The musical score is for five players in 4/4 time, marked 'Allegro'. Player 1 starts with a piano (*p*) dynamic, playing a series of half notes with slurs. Player 2 starts with a pianissimo (*pp*) dynamic, playing eighth notes with slurs. Player 3 starts with a mezzo-forte (*mf*) dynamic, playing quarter notes with slurs, and later changes to mezzo-piano (*mp*). Player 4 starts with mezzo-piano (*mp*) dynamics, playing quarter notes with accents, and later changes to mezzo-forte (*mf*). Player 5 starts with mezzo-piano (*mp*) dynamics, playing eighth notes with slurs, and later changes to forte (*f*) dynamics, playing sixteenth notes with slurs.

14

Player 1

Player 2

Player 3

Player 4

Player 5

*p* *mf* *p* *pp*

This musical score consists of five staves, labeled Player 1 through Player 5, spanning measures 14 to 21. The music is written in treble clef with a key signature of one flat (Bb). Player 1's part features a melodic line with several slurs, starting with a half note and followed by quarter notes. Player 2's part is more rhythmic, with eighth and sixteenth notes, also featuring slurs. Player 3's part has a melodic line with dynamics markings of *p* (piano) and *mf* (mezzo-forte). Player 4's part consists of a series of chords and single notes, with a dynamic marking of *p* and several accents (^). Player 5's part begins with a series of slurs over eighth notes, followed by a section with a dynamic marking of *pp* (pianissimo) and slurs over sixteenth notes.



27

Player 1

Player 2

Player 3

Player 4

Player 5

*pp* *mf*

*p* *f* *ff*

FOR PERUSAL USE ONLY

38

Player 1

Player 2

Player 3

Player 4

Player 5

*f* *mp* *p*

48

Player 1

Player 2

Player 3

Player 4

Player 5

*pp* *mp* *p*

This musical score consists of five staves, each labeled 'Player 1' through 'Player 5'. The music begins at measure 48. Player 1 plays a melodic line with a series of slurs over the first 10 measures. Player 2 plays a more active line with slurs and a 'p' dynamic marking at the end. Player 3 plays a sparse line with slurs. Player 4 plays a rhythmic line with slurs and accents. Player 5 plays a rhythmic line with slurs, 'pp' and 'mp' dynamic markings, and accents.

59

Player 1

Player 2

Player 3

Player 4

Player 5

*mp* *mf* *mf* *f*

Detailed description of the musical score: The score consists of five staves, each labeled 'Player 1' through 'Player 5'. The music is in a common time signature. Player 1's part begins at measure 59 with a treble clef and a series of notes, some of which are beamed together and have slurs above them. Player 2's part features a rhythmic pattern of eighth notes with accents, interspersed with rests. Player 3's part has a few scattered notes with accents. Player 4's part is a bass line with notes and accents, including a flat sign. Player 5's part has a rhythmic pattern of eighth notes with accents, starting in measure 60. Dynamic markings include *mp* (mezzo-piano), *mf* (mezzo-forte), and *f* (forte).

67

Player 1

Player 2

Player 3

Player 4

Player 5

*f* *mf* *p* *f*

*f* *mf*

*p* *fp*

FOR PERUSAL USE ONLY

# Collatz workout

## VIII

7 **Allegro**  
Spritely

Player 1 *mp*

Player 2 Majestic *f*

Player 3 Whimsical *f*

Player 4 Pompous *mf*

Player 5 Modest *p*

9

Player 1

*mf* *f* *mf* *mp*

Player 2

Player 3

Player 4

Player 5

*mp*

# Collatz workout

## IX

1 Allegro

Player 1 *p* *mp* *pp* *mf*

Player 2 *mf*

Player 3 *mf*

Player 4 *f*

Player 5 *mp* *pp* *mf*

The musical score is for five players in 4/4 time, marked 'Allegro'. Player 1 starts with a piano (*p*) dynamic, followed by mezzo-piano (*mp*) and pianissimo (*pp*) sections, ending with mezzo-forte (*mf*). Player 2 plays a mezzo-forte (*mf*) accompaniment with accents. Player 3 plays a mezzo-forte (*mf*) line with slurs. Player 4 plays a forte (*f*) line with slurs. Player 5 starts with mezzo-piano (*mp*), then pianissimo (*pp*), and ends with mezzo-forte (*mf*). A large watermark 'FOR PERUSAL USE ONLY' is overlaid on the score.



17

Player 1

Player 2

Player 3

Player 4

Player 5

*f*

*f*

*mp*

*pp*

*mp*

33

Player 1

Player 2

Player 3

Player 4

Player 5

*mp* *pp* *p* *mp* *mf* *f* *ff*

48

Player 1

Player 2

Player 3

Player 4

Player 5

*mp* *f* *p* *f*

*p* *pp* *p*

*p* *f*

*pp* *ff*

FOR PERUSAL USE ONLY

61

Player 1

Player 2

Player 3

Player 4

Player 5

*p* *pp* *mp* *mf* *f* *pp* *f* *p* *f* *p*

74

Player 1 *f* *p* *pp*

Player 2

Player 3

Player 4

Player 5 *f* *p* *pp* *f*

The musical score consists of five staves, each labeled 'Player 1' through 'Player 5'. The music is written in treble clef with a key signature of one flat (B-flat). The score begins at measure 74. Player 1 starts with a forte (*f*) dynamic, playing a melodic line with eighth and sixteenth notes. The dynamic changes to piano (*p*) in measure 75 and then to pianissimo (*pp*) in measure 76. Player 2 plays a steady eighth-note accompaniment. Player 3 plays a more complex eighth-note accompaniment with some rests. Player 4 plays a melodic line with long, sweeping slurs. Player 5 has a dynamic progression of *f*, *p*, *pp*, and *f* across the measures. A large, semi-transparent watermark reading 'FOR PERUSAL USE ONLY' is oriented diagonally from the bottom-left to the top-right of the page.

82

Player 1

Player 2

Player 3

Player 4

Player 5

*f* *p*

*mf* *mp*

*p* *pp* *p*

# Collatz workout

X

1 Allegro

Player 1 *mf*

Player 2 *mp* *f* *ff* *pp*

Player 3 *mp* *f*

Player 4 *mp* *pp* *f* *pp*

Player 5 *mf* *p* *f* *pp*

15

Player 1

Player 2

Player 3

Player 4

Player 5

*f* *p* *mp* *mf* *mp* *p* *mf*

*f* *mp* *mf* *mp* *p* *mf*

*f* *ff* *pp*

*mf* *f*

FOR PERUSAL USE ONLY



22

Player 1

Player 2

Player 3

Player 4

Player 5

*f* *mf* *p* *mp* *p*

*mp* *p*

*p* *mp* *p*

*mf*

# Collatz workout

## XI

1 Allegro

Player 1 *f* *p* *pp*

Player 2 *p* *f* *pp* *mp*

Player 3 *p* *pp* *f*

Player 4 *p*

Player 5 *f*

The musical score is for five players in 4/4 time, marked 'Allegro'. Player 1 starts with a forte (*f*) dynamic, followed by piano (*p*) and pianissimo (*pp*). Player 2 begins with piano (*p*), then forte (*f*), pianissimo (*pp*), and mezzo-piano (*mp*). Player 3 starts with piano (*p*), then pianissimo (*pp*), and forte (*f*). Player 4 starts with piano (*p*). Player 5 starts with forte (*f*). The score includes various articulations such as accents, slurs, and phrasing slurs. A large watermark 'FOR PERUSAL USE ONLY' is overlaid diagonally across the page.

18

Player 1

Player 2

Player 3

Player 4

Player 5

*mf*

*mf*

*pp*

*ppp*

*mp*

*f*

*p*

*mf*

*f*

*ff*

*ff*

*f*

*pp*

*ff*

33

Player 1

Player 2

Player 3

Player 4

Player 5

*f* *ff* *f* *pp*

*pp* *mf* *p* *f* *pp*

*p* *ff* *p*

46

Player 1

Player 2

Player 3

Player 4

Player 5

*p* *mp* *pp* *f* *ff* *f* *p* *pp* *f* *f* *pp*

58

Player 1 *mp* *v* *f*

Player 2 *mf* *f* *p* *pp* *mf* *ff*

Player 3 *p* *pp* *f* *p* *f* *ff*

Player 4 *ppp* *pp*

Player 5

The musical score consists of five staves, each labeled 'Player 1' through 'Player 5'. The music is written in treble clef. Player 1 starts at measure 58 with a melody of eighth notes, marked *mp*, with accents (*v*) and a dynamic change to *f*. Player 2 has a melody of eighth notes, marked *mf*, with dynamics *f*, *p*, *pp*, *mf*, and *ff*. Player 3 has a melody of eighth notes, marked *p*, with dynamics *pp*, *f*, *p*, *f*, and *ff*. Player 4 has a melody of eighth notes, marked *ppp*, with dynamics *pp*. Player 5 has a melody of half notes, marked with a slur over measures 59-60. The score ends with a double bar line and repeat dots.

# Collatz workout

## XII

1 Allegro

Player 1 *ff*

Player 2 *ff*

Player 3 *ff*

Player 4 *ff*

Player 5 *ff*

17

Player 1

Player 2

Player 3

Player 4

Player 5

The musical score consists of five staves, each labeled 'Player 1' through 'Player 5'. The score begins at measure 17. Player 1's part features a series of half notes with slurs, starting on a middle C. Player 2's part starts with a quarter rest, followed by a melodic line with slurs. Player 3's part is a rhythmic accompaniment consisting of eighth and sixteenth notes. Player 4's part features a melodic line with slurs, similar to Player 1. Player 5's part features a melodic line with slurs, similar to Player 1. A large, semi-transparent watermark reading 'FOR PERUSAL USE ONLY' is oriented diagonally across the page.



27

Player 1

Player 2

Player 3

Player 4

Player 5

The musical score consists of five staves, each labeled 'Player 1' through 'Player 5'. The score begins at measure 27. Player 1's part features a series of long, sustained notes, some with slurs. Player 2's part is more rhythmic, using eighth notes and rests. Player 3's part is the most complex, featuring a rapid sequence of sixteenth notes. Player 4's part provides a steady accompaniment with eighth notes. Player 5's part is similar to Player 1, with long, sustained notes. A large, semi-transparent watermark reading 'FOR PERUSAL USE ONLY' is oriented diagonally across the entire page.