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**Title**

Mendeleev

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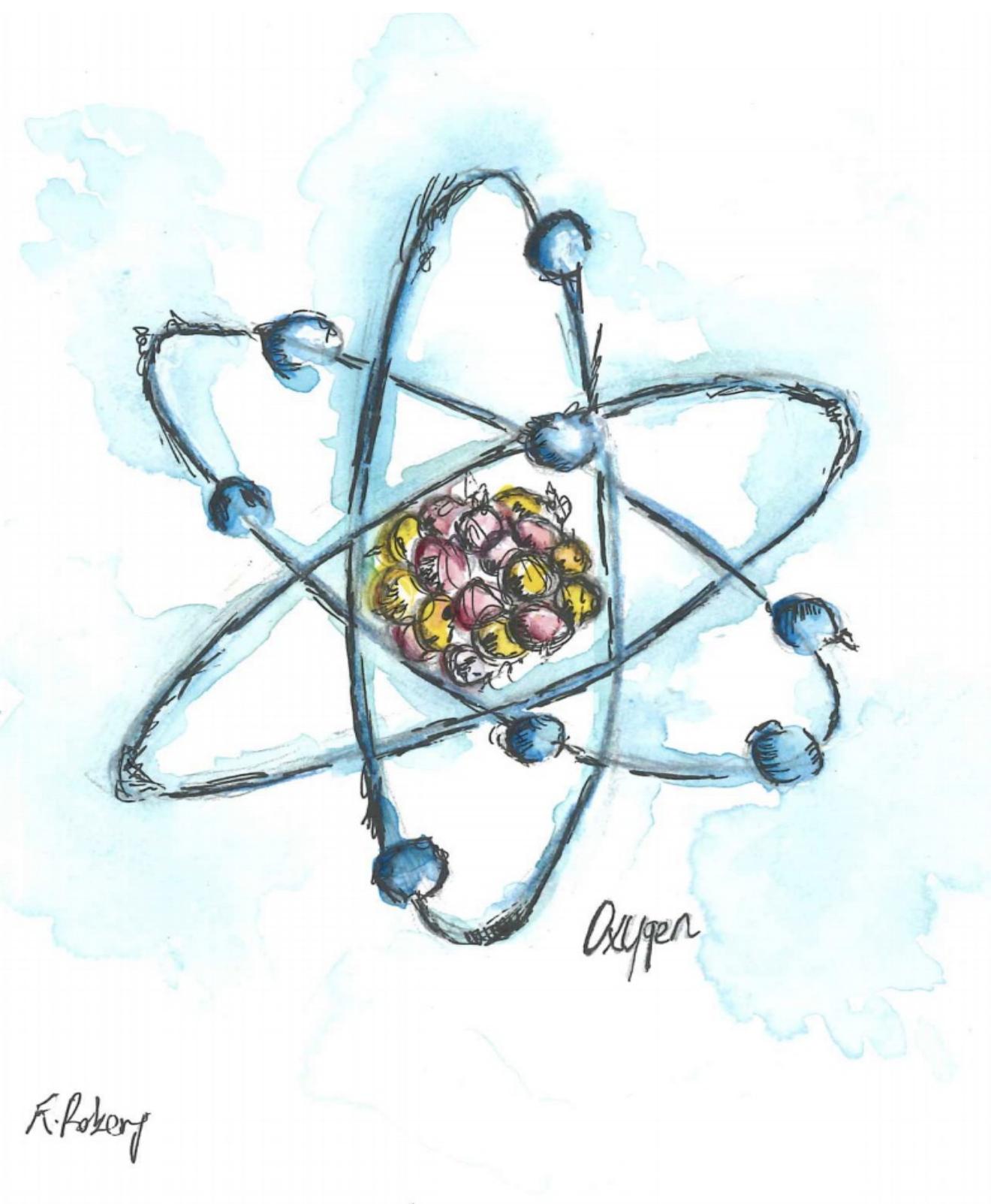
2020

Full Score in C

# Mendeleev

*For Orchestra*

Ella Roberts (2019)



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## *For Orchestra*

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Full Score in C

Duration: Ca. 5' 45"

2 Flutes  
Piccolo/Alto Flute  
2 Oboes  
Cor Anglais  
2 Clarinets in B♭  
Bass Clarinet in B♭  
2 Bassoons  
Contrabassoon

4 Horns in F  
2 Trumpets in B♭  
2 Tenor Trombones

Timpani

Percussion (*For 3 Players*)

Perc. 1:  
Vibraphone, Bass Drum

Perc. 2:  
Suspended Cymbal, Marimba, Tubular  
Bells

Perc. 3  
Triangle, Tom-toms

Harp

Piano/Celeste

Violin I  
Violin II  
Viola  
Violoncello  
Double Bass

## Programme Note:

*Mendeleev* celebrates chemist Dmitri Mendeleev's invention of the modern periodic table of elements. The piece has been composed to mark the 150 year anniversary of the Russian scientist's revolutionary discovery. The composer intends for *Mendeleev* to remind audiences of this overlooked discovery, which is integral to the world we live in. Mendeleev first realised his method for categorising the elements through a dream. The music carries the listener through this dream like state, predominantly through the use of ambiguous harmony, soft timbres and extended techniques. As the dream progresses, themes are introduced, each one of these musical gestures reflects the properties of a specific element. These themes have been labelled within the score with the element's corresponding chemical symbol.

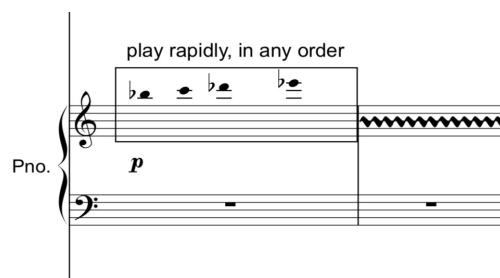
The modern periodic table of elements has been utilised by the composer as a compositional tool. In addition to basing the themes on the properties of the elements, the atomic structures of each element have assisted in generating material.

"I saw in a dream a table where all elements fell into place as required."

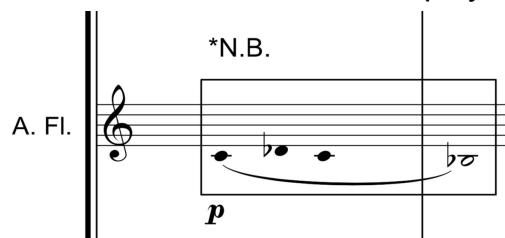
-Dmitri Mendeleev

## Performance Notes:

Aleatoric notation has been utilised in some of the parts:



The above notation indicates that the four boxed notes should be repeated rapidly until the wavy line ends, the rhythm and order in which the notes are played can vary, this is at the discretion of the player.



When boxed note heads without stems appear in the woodwind parts these notes should be played with rubato. If each player plays with this freedom of time, parts of the phrase will overlap or become out of sync. This is the desired effect.



The above notation indicates that the harpist should slap the lower strings with the palm.

In harp and percussion parts - a tie indicates that the performer should let the instrument ring/vibrate and not immediately dampen.

Percussion notes:

A Double Bass bow is required for some sections of the Vibraphone part, this has been clearly marked on the score.

The Marimba and Tom Toms should be played with hard sticks. The Suspended cymbal should be played with soft cymbal beaters.



# Mendeleev

Ella Roberts (2019)

3

**Distant, In a Dream State**  $\text{♩} = 50$ 

Piccolo  
Flute 1.2  
Alto Flute  
Oboe 1.2  
Cor Anglais  
Clarinet in B♭ 1.2.  
Bass Clarinet in B♭  
Bassoon 1.2.  
Contrabassoon

This section of the score contains ten staves. The instruments are: Piccolo, Flute 1.2, Alto Flute, Oboe 1.2, Cor Anglais, Clarinet in B♭ 1.2., Bass Clarinet in B♭, Bassoon 1.2., and Contrabassoon. The Alto Flute has a melodic line with dynamic markings *p* and *mp*. The Oboe 1.2 has sustained notes. The other instruments play sustained notes.

Horn in F  
Trumpet in B♭ 1.2  
Trombone 1.2  
Timpani  
Percussion 1  
Percussion 2  
Percussion 3

This section of the score contains six staves. The instruments are: Horn in F (staves 1, 3, 4), Trumpet in B♭ 1.2 (staves 2, 4), Trombone 1.2 (staves 3, 4), Timpani (staves 1, 2, 3, 4), Percussion 1, Percussion 2, and Percussion 3. The Percussion 1 staff includes a Vibraphone part with dynamic *mp*. The Percussion 2 staff includes a Suspended Cymbal part. The Percussion 3 staff includes a Triangle part.

Harp  
Piano

This section of the score contains two staves. The instruments are: Harp and Piano. The Harp staff has a note list: D♭, C, B♭, E♭, F, G♭, A♭. The Piano staff is mostly blank.

3

**Distant, In a Dream State**  $\text{♩} = 50$ 

sul tasto

Violin I  
Violin II  
Viola  
Violoncello  
Double Bass

This section of the score contains five staves. The instruments are: Violin I, Violin II, Viola, Violoncello, and Double Bass. The strings play sustained notes with dynamic markings *pp*, *sul tasto*, *divisi.*, *pp*, *sul tasto*, *mp*, *pp*, *sul tasto*, *divisi.*, *pp*, *mp*, *pp*, *mp*, and *pp*.

**A**

9

Fl. *p*

A. Fl. *mp*

Ob. *p* *mp*

Cl. *a2* *p* *mp*

B. Cl. *p* *mp*

Bsn. *p* *mp*

Perc. 1 *mf*

Perc. 2 *mp*

Hp. *mp*

Pno. *mp* *mf*

With Sustain Pedal, *ad. lib.* throughout

**A**

Vln. I ord. *b* *mp*

Vln. II ord. *b* *o* *mp*

Vla. ord. *b* *o* *mp*

Vc. *p* ord. *b* *o* *mp*

Db. *p* ord. *b* *o* *mp*

12

Fl.

A. Fl.

Ob.

Cl.

B. Cl.

Bsn.

Perc. 1

(to bow)

Perc. 2

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D. B.

**B**

15

Fl.  $\text{b}\ddot{\text{o}}$  *mf*

A. Fl.  $\text{b}\ddot{\text{o}}$  *mf*

Ob.  $\text{b}\ddot{\text{g}}$  *mf*

Cl.  $\text{b}\ddot{\text{o}}$  *mf*

B. Cl.  $\text{b}\ddot{\text{o}}$  *mf*

Bsn.  $\text{b}\ddot{\text{o}}$  *mf*

Cbsn.  $\text{b}\ddot{\text{o}}$

Hn.  $\text{b}\ddot{\text{o}}$

Perc. 1 *with bow*  $\text{v}$   $\text{v}$  *(to mallets)*  $\text{f}$  *with mallets*

Hp.  $\text{b}\ddot{\text{o}}$  *mf*

Pno.  $\text{b}\ddot{\text{o}}$  *mf*

Vln. I  $\text{b}\ddot{\text{o}}$  *mf*

Vln. II  $\text{b}\ddot{\text{o}}$  *mf*

Vla.  $\text{b}\ddot{\text{o}}$  *mf*

Vc.  $\text{b}\ddot{\text{o}}$  *mf*

Db.  $\text{b}\ddot{\text{o}}$  *mf*

unis.

18 a2

Fl. Cl. B. Cl. Cbsn. Hn. Timp. Perc. 1 Hp. Pno. Vln. I Vln. II Vla. unis. Vc. Db.

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

Ella Roberts - Mendeleev For Orchestra



## C

7

26 

Fl. 1. solo *mp* a2 *p*

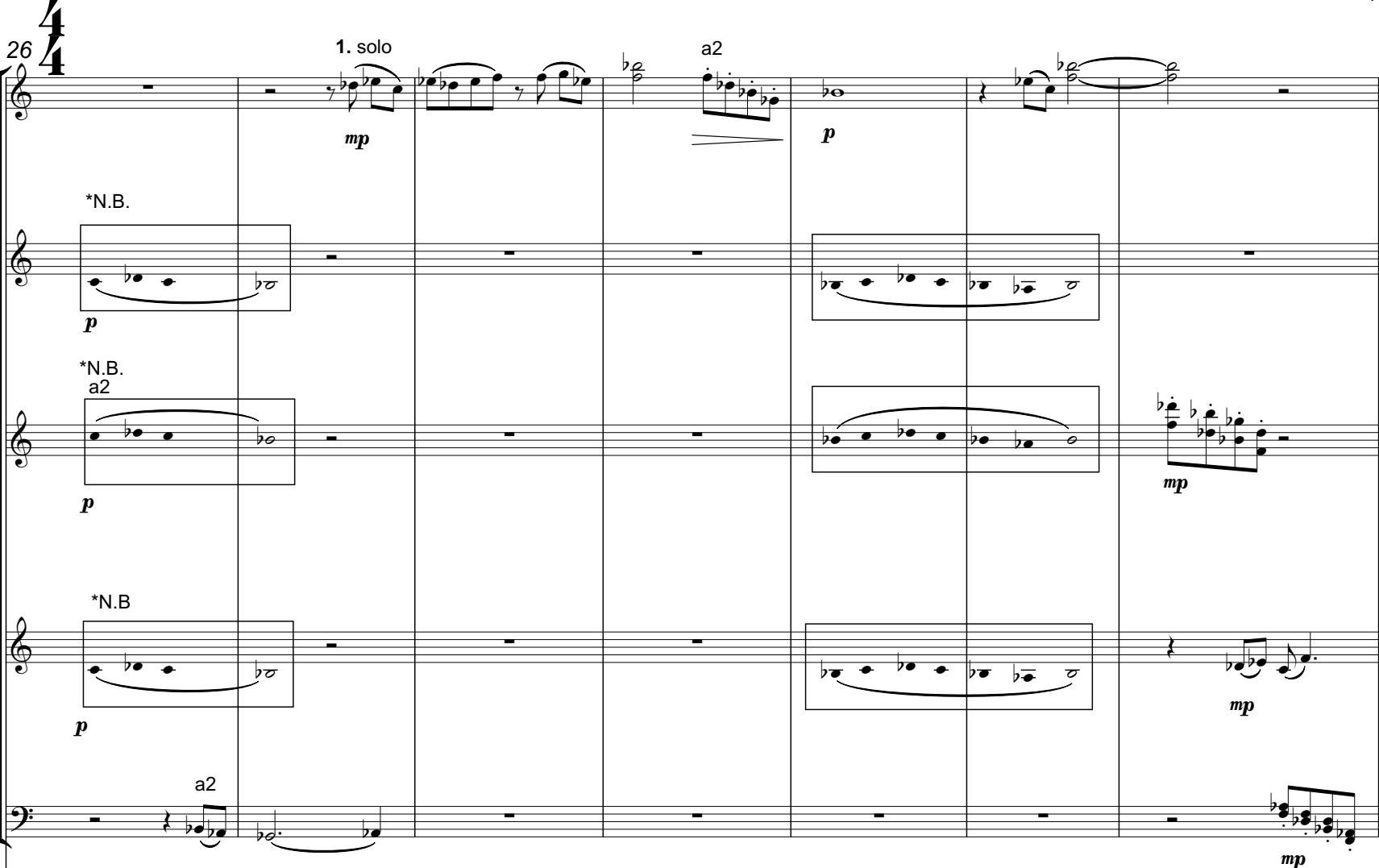
\*N.B. *p*

A. Fl. \*N.B. a2 *p*

Ob. \*N.B. a2 *p*

Cl. \*N.B. *p*

Bsn. a2 *p* *mp*



Perc. 1 *mp*

Perc. 3 *mp* To Tom-toms

Hp. *mp* *mf* G<sub>b</sub> *p*



## C

Vln. I *p* *mp* *p*

Vln. II *p* *mp* *p*

Vla. *p* *mp* *p*

Vc. *p* *mp* *p*

D. b. *p* *mp* *p*


\*N.B. - To be played with rubato, *ad lib.*

D

38

$\frac{4}{4}$

Vln. I

Vln. II

Vla.

Vc.

Db.

E

Fl. *p* *f subito* *p* *ff* *mf*

Ob. *p* *f subito* *p* *ff* *mf*

Cl. *p* *f* *p* *ff* *mf* a2

B. Cl. *p* *f subito* *p* *ff* *mf*

Bsn. *p* *f subito* *p* *ff* *mf*

Cbsn. *p* *f subito* *p* *ff* *mf*

Hn. (a2) *p* *ff* *mf*

(a2) *p* *ff* *mf*

Tpt. 1. 5 *mp* *f* *mf* *ff* *mf*

Hp. *ff* *slap, let ring* *mf*

Vln. I *mp* *ff* *mf*

Vln. II *mp* *ff* *mf*

Vla. *mp* *ff* *mf*

Vc. *mp* *ff* *mf*

Db. *pizz.* *ff* *mf*

arco



**F** Delicate, with Movement  $\text{♩} = 120$

11

48

Fl.      wide vib.  $p$       1. solo  $mf$   $p$

A. Fl.      wide vib.  $p$

Ob.

Cl.      Ga Gallium      1. solo  $mf$   $p$

B. Cl.      1. solo  $mf$   $p$

Hn.       $pp$

Perc. 1       $pp$       V with bow      V      V

mp

play rapidly, in any order

Hp.       $p$

Pno.      (8)  $p$

**F** Delicate, with Movement  $\text{♩} = 120$

sul pont.      ord. I

Vln. I       $p$

Vln. II       $p$

Vla.       $p$

Vc.       $p$

Db.       $p$

II      sul pont.

ord.

III gliss.      III gliss.      IV gliss.      IV gliss.

**G**

56

Fl. *p*

A. Fl. *mf* **Oxygen**

Ob. *p*

Cl. *mf* *p*

B. Cl.

1. *mf* *p*

Perc. 1 (to mallets) with mallets

Hp.

Pno. *p*

play rapidly, in any order

**G**

Vln. I

Vln. II *ord.*

Vla. *sul tasto*

Vc. *sul tasto*

Db. *ord.* *mf*

*mf* *p*

*mf*

63

Fl. *p*

A. Fl. *mp*

Ob.

Cl.

Bsn. *mf* *p*

*a2*

*mp*

*to picc.*

*1. solo*

Perc. 1 play rapidly, in any order *p*

Hp.

Pno.

Vln. I

Vln. II *mf*

Vla. *p*

Vc. *mf*

Db. *p*

*ord.*

*mf*

*mf*

*mf*

*mp*

**H** Playful, Lively

71

Picc. *p* *f*

Fl. *a2* *f*

Ob. *(a2)* *f* *mf*

Cl. *a2* *f* *mf* *f*

B. Cl.

Bsn. *mf* *(a2)* *mf*

Cbsn. *mf*

Hn. *1. solo* *mf*

Perc. 1 *p*

Hp. *p*

Pno. *p*

**H** Playful, Lively

ord.

Vln. I *f* *mf*

Vln. II *f* *mf*

Vla. *f* *mf*

Vc. *He Helium* *pizz.* *f* *mf* *arco*

D. b. *pizz.* *f* *mf*

78

Picc.

Fl.

A. Fl.

Ob.

C. A.

Cl.

B. Cl.

Bsn.

Cbsn.

Hn.

1.

Perc. 1

To Bass Drum

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D. b.

play rapidly, in any order

p

arco

f

mf

f

mf

I Erratic, Unstable

83

Picc. *mf*

Fl. *mf*

Ob.

Cl. *mf*

B. Cl.

Bsn. *mf*

Cbsn. *mf*

Hn. *a2*

Tpt. *mf* *f* *a2*

Tbn. *mf* *a2*

Perc. 1 [Bass Drum]

Perc. 2 [Marimba] *f*

Hp. *p*

Pno. *p*

I Erratic, Unstable

Vln. I *mf*

Vln. II *mf*

Vla. *p* pizz.

Vc. *mf*

Db. *mf*

88

Picc. -

Fl. f

Ob. f

Cl. 5 a2 ff

B. Cl. 3 3 mf

Bsn. f

Cbsn. f 5 mf f

Hn. f

Tpt. f

K Potassium a2 ff

Tbn. f

Perc. 1

Perc. 2

Hp. D<sub>b</sub>, C, B<sub>b</sub>, E<sub>b</sub>, F, G<sub>b</sub>, A<sub>b</sub> f gliss.

Pno. f 5 mf ff 5

Vln. I 3 3 f mf ff

Vln. II 3 3 f pizz. ff

Vla. ff

Vc. ff

Db. ff

J

Musical score for orchestra and piano, page 92. The score includes parts for Picc., Fl., Ob., Cl., B. Cl., Bsn., Cbsn., Hn., Tpt., Tbn., Perc. 1, Perc. 2, Perc. 3, Hp., and Pno. The score features complex rhythmic patterns and dynamic markings such as *ff*, *mf*, and *gliss.*

The score consists of two systems of music. The first system begins with a dynamic of *ff* and includes measures 1 through 5. The second system begins with a dynamic of *f* and includes measures 6 through 10. The instruments play various melodic and harmonic lines, with some parts featuring sustained notes or rhythmic patterns. The percussion parts (Perc. 1, Perc. 2, Perc. 3) provide rhythmic support, while the piano part (Pno.) provides harmonic underpinning. The score concludes with a final dynamic of *f*.

J

Musical score for orchestra showing measures 11-12. The score includes parts for Vln. I, Vln. II, Vla., Vc., and Db. Measure 11 starts with a dynamic of  $\text{f}$ . Measures 11-12 feature eighth-note patterns with grace notes and slurs. Measure 12 ends with a dynamic of  $f$ .

Musical score page 19, system 2, featuring a complex arrangement for orchestra and piano. The score includes parts for Picc., Fl., Ob., Cl., B. Cl., Bsn., Cbsn., Hn., Tpt., Tbn., Timp., Perc. 1, Perc. 2, Perc. 3, Hp., Pno., Vln. I, Vln. II, Vla., Vc., and Db. The score is marked with dynamic instructions such as *flz.*, *ff*, *mf*, *gliss.*, and *f*. The piano part features a prominent role for the celeste, indicated by a triangle symbol above the staff. The score concludes with a forte dynamic *fff*.

**K** Powerful ♩ = 50

to Alto Flute

100

**K** Powerful ♩ = 50

## L

Light, Delicate  $\text{♩} = 50$ 

21

**6**

105

A. Fl.

C. A.

Vibraphone

Perc. 1

p

To Sus. Cymbal

Perc. 2

Triangle

Perc. 3

p

Hp.

p

This page contains six staves of musical notation. The first two staves are for woodwind instruments: A. Flute and C. Alto. The third staff is for the Vibraphone, which plays a continuous line of eighth notes. The fourth staff is for Percussion 1, featuring a mix of eighth-note patterns and sustained notes. The fifth staff is for Percussion 2, which remains silent throughout the measure. The sixth staff is for Percussion 3, which plays eighth-note patterns. The final staff is for the Bassoon (Hp.), also playing eighth-note patterns. Various dynamic markings like 'mp' and 'p' are placed above the staves, and performance instructions like 'To Sus. Cymbal' and 'Triangle' are included.

## L

Light, Delicate  $\text{♩} = 50$ 

**6**

8

sul tasto

Vln. I

p

sul tasto

Vln. II

p

sul tasto

Vla.

p

solo expressive

Vc.

mf

ord.

ord.

ord. divisi

tutti

mp

mp

mp

This page contains four staves of musical notation. The first three staves are for bowed strings: Violin I, Violin II, and Viola. They play eighth-note patterns with dynamic markings 'sul tasto' and 'p'. The fourth staff is for the Cello (Vc.), which plays eighth-note patterns with a dynamic marking 'mf'. Performance instructions like 'ord.', 'ord. divisi', and 'tutti' are placed above the staves.

114

Fl. *mp* *f* *mp*

A. Fl.

Ob. *mp* *f* *mp*

C. A. *f* *mp*

Cl. *mp* *f*

Hn. *mp* *a2*

Perc. 1 *f* *mp*

Perc. 3 *mp*

Hp. *f* *p*

Vln. I *mf* *mp* *f* *mp*

Vln. II *mf* *mp* *f* *mp* *b2*

Vla. *f* *mp*

Vc. *f* *mp*

D. b. *mp* *f*



125

Fl.

A. Fl.

Ob.

C. A.

Cl.

Bsn.

Perc. 1

Perc. 3

Hp.

Cel.

Vln. I

Vln. II

Vla.

Vc.

Db.

28

6

28

6

unis.

pizz.

v.

**N**

130

A. Fl. *mp*

Cl. *mf*

Hn. *mp*

*a2*

Perc. 1 *mp*

(to bow)

Perc. 2 *p*

Hp. *mp*

*mf*

Cel. *mp*

*mf*

**N**

Vln. I *p*

Vln. II *p*

Vla. *p*

Vc. *p*

Db. *p*

unis.

*mf*

II

*mf*

arco

pizz.

*mf*

arco

pizz.

*mf*

O

136

Fl. *mp*

A. Fl. *mp*

C. A.

Cl. *p* *mp* *a2*

Bsn. *mp*

Hn. *mp* *a2*  
2. *mp*

Perc. 1 *mf* *mf* (to mallets)

Perc. 3 *mf*

Hp.

Cel.

Vln. I *p* I

Vln. II III *p* II

Vla. *p*

Vc. *p*

D. b. *p*

