

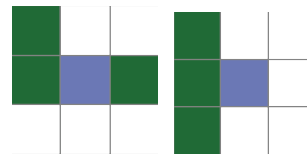
El Juego de la Vida

Instrucciones

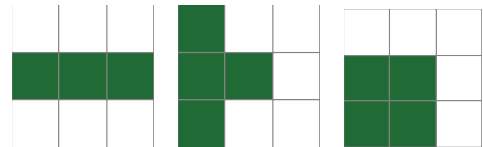
El juego de la vida es una propuesta musical creada por David Gaviria Piedrahita y basada en el experimento del matemático John Conway, designado con el mismo nombre. En éste, se asignan tres reglas a un grupo de celdas que se consideran “vivas” cuando están activas, “muertas” al estar inactivas, y que al interactuar a través del tiempo cambian su estado en cada movimiento o turno, creando así, complejos patrones de textura y ritmo, para la construcción de una obra musical en constante mutación.

Las tres reglas creadas originalmente en 1970 por Conway y que gobiernan el juego de la vida son:

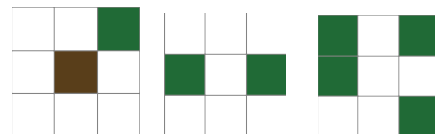
- Una celda muerta con exactamente 3 celdas vecinas vivas “nace” en el siguiente turno.



- Una celda viva con 2 ó 3 celdas vecinas vivas; “sobrevive”.



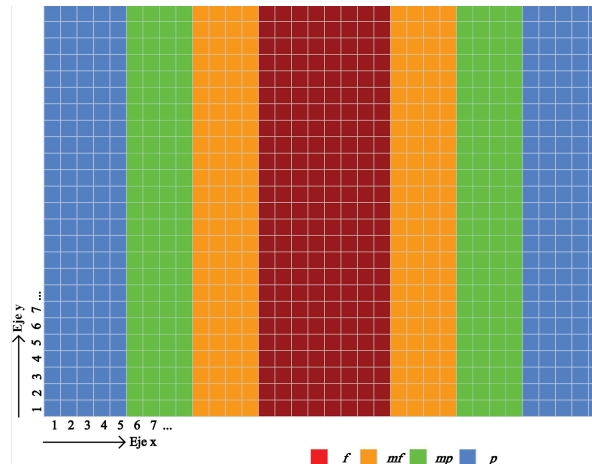
- En todos los otros casos, la celda muere o permanece muerta ya sea por "soledad" o "superpoblación".



**En los gráficos anteriores; el color verde; representa las celdas vivas, el café; las celdas que en el siguiente turno morirán, y el violeta; quienes en el siguiente turno nacerán.*

Para la ejecución musical del juego de la vida

- El estado de cada celda (vivo o muerto) lo determina un software que se rige por las tres leyes originales del juego de la vida.
- Las celdas se identifican con un sistema de coordenadas alfanuméricas (x,y) en una cuadrícula de **34x25**.



- A cada celda corresponde un compás musical, el cuál se encuentra referenciado con el mismo sistema de coordenadas mencionado anteriormente.
- A cada instrumento o voz le corresponde una celda-compás musical que debe ser interpretado de acuerdo al los patrones determinados por el software.
- El tempo de la pieza debe ser moderado permitiendo así una apreciación de los diferentes grados de complejidad en la textura armónica y melódica.
- Para interpretar la obra se necesitarían un total de 850 instrumentos de la misma familia instrumental, dirigidos por un software especializado, aunque también es posible su realización, valiéndose de un software como el anteriormente mencionado y que además posea la capacidad de reproducir gran cantidad de *samples* de manera simultánea.
- La duración de la pieza depende del intrincado desarrollo de un patrón inicial, haciendo que ésta pueda durar 3 segundos o extenderse hasta el infinito, dado el caso, se permite a los intérpretes finalizar la pieza discreción.

Si tiene alguna duda o comentario no dude en contactar al autor:

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x1 yl

p

x2 yl

p

x3 yl

p

x4 yl

p

x5 yl

p

x6 yl

mp

x7 yl

mp

x8 yl

mp

x9 yl

mp

x10 yl

mf

x11 yl

mf

x12 yl

mf

x13 yl

mf

x14 yl

f

x15 yl

f

x16 yl

f

x17 yl

f

x18 yl

f

x19 yl

f

x20 yl

f

x21 yl

f

x22 yl

mf

x23 yl

mf

x24 yl

mf

x25 yl

mf

x26 yl

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mp

x28 yl

mp

x29 yl

mp

x30 yl

p

x31 yl

p

x32 yl

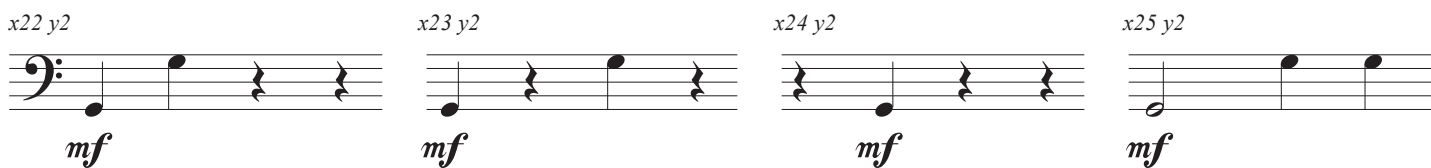
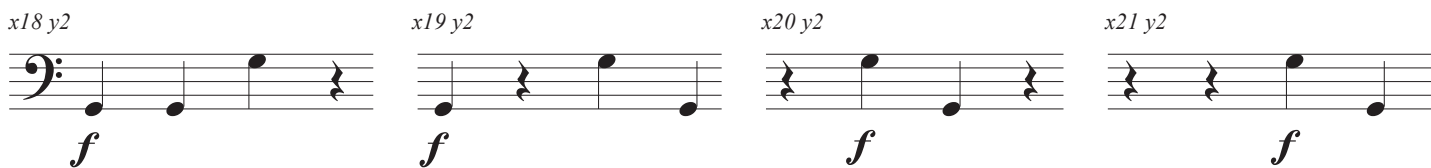
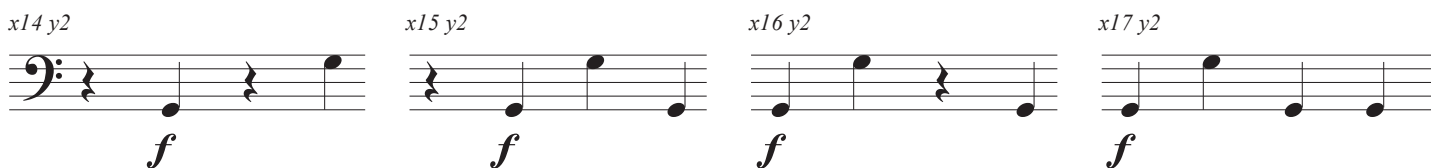
p

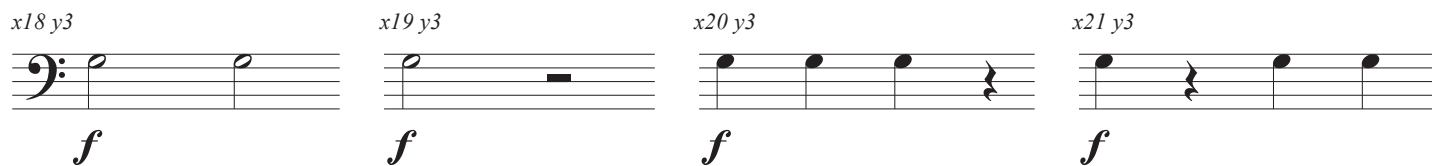
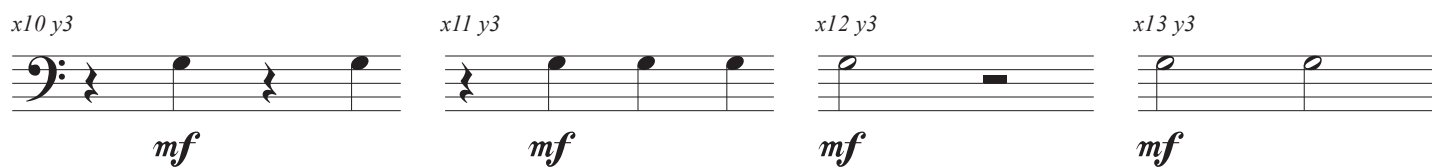
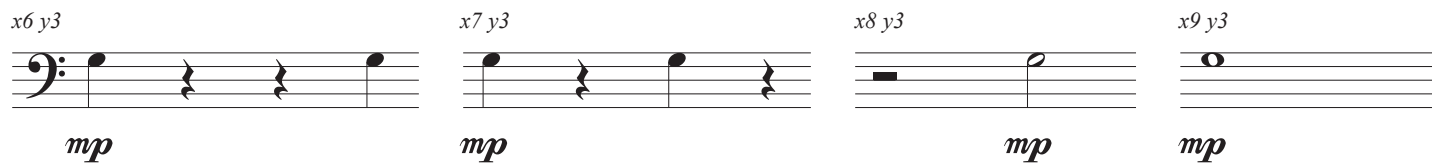
x33 yl

p

x34 yl

p





Handwritten musical notation for 34 exercises, arranged in 7 rows of 5 exercises each (the last row contains 4 exercises). Each exercise is labeled with a number and a dynamic marking.

Exercise 1: *x1 y4*, *p*

Exercise 2: *x2 y4*, *p*

Exercise 3: *x3 y4*, *p*

Exercise 4: *x4 y4*, *p*

Exercise 5: *x5 y4*, *p*

Exercise 6: *x6 y4*, *mp*

Exercise 7: *x7 y4*, *mp*

Exercise 8: *x8 y4*, *mp*

Exercise 9: *x9 y4*, *mp*

Exercise 10: *x10 y4*, *mf*

Exercise 11: *x11 y4*, *mf*

Exercise 12: *x12 y4*, *mf*

Exercise 13: *x13 y4*, *mf*

Exercise 14: *x14 y4*, *f*

Exercise 15: *x15 y4*, *f*

Exercise 16: *x16 y4*, *f*

Exercise 17: *x17 y4*, *f*

Exercise 18: *x18 y4*, *f*

Exercise 19: *x19 y4*, *f*

Exercise 20: *x20 y4*, *f*

Exercise 21: *x21 y4*, *f*

Exercise 22: *x22 y4*, *mf*

Exercise 23: *x23 y4*, *mf*

Exercise 24: *x24 y4*, *mf*

Exercise 25: *x25 y4*, *mf*

Exercise 26: *x26 y4*, *mp*

Exercise 27: *x27 y4*, *mp*

Exercise 28: *x28 y4*, *mp*

Exercise 29: *x29 y4*, *mp*

Exercise 30: *x30 y4*, *p*

Exercise 31: *x31 y4*, *p*

Exercise 32: *x32 y4*, *p*

Exercise 33: *x33 y4*, *p*

Exercise 34: *x34 y4*, *p*

x1 y5
p

x2 y5
p

x3 y5
p

x4 y5
p

x5 y5
p

x6 y5
mp

x7 y5
mp

x8 y5
mp

x9 y5
mp

x10 y5
mf

x11 y5
mf

x12 y5
mf

x13 y5
mf

x14 y5
f

x15 y5
f

x16 y5
f

x17 y5
f

x18 y5
f

x19 y5
f

x20 y5
f

x21 y5
f

x22 y5
mf

x23 y5
mf

x24 y5
mf

x25 y5
mf

x26 y5
mp

x27 y5
mp

x28 y5
mp

x29 y5
mp

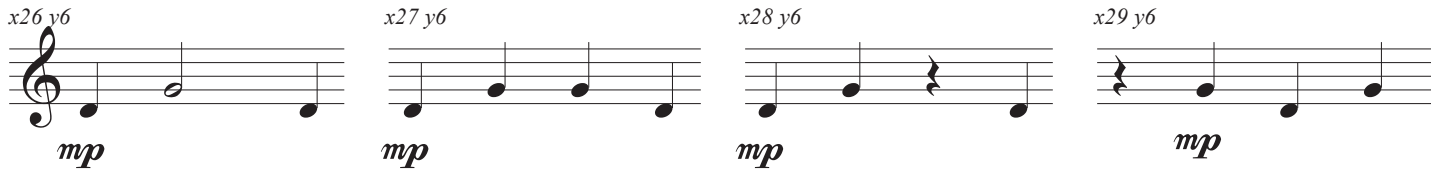
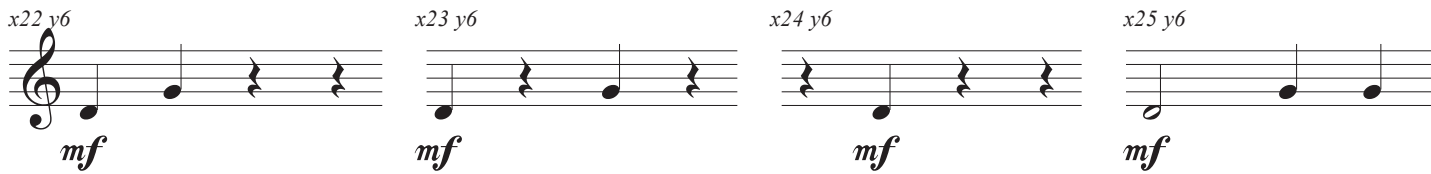
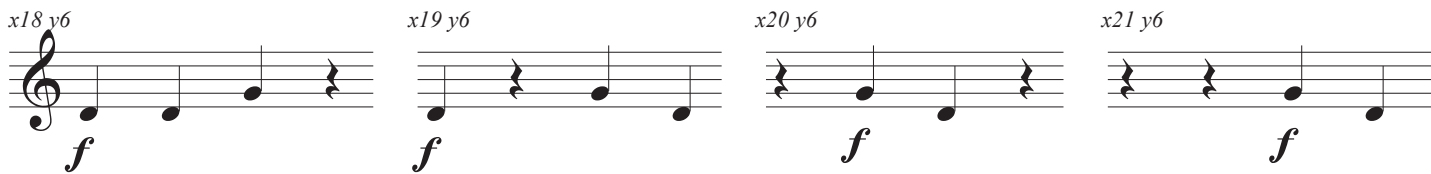
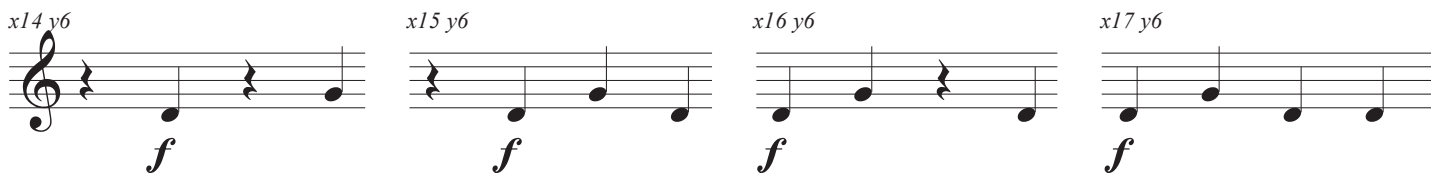
x30 y5
p

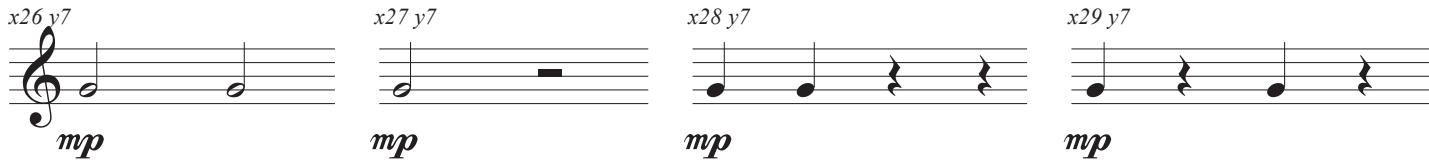
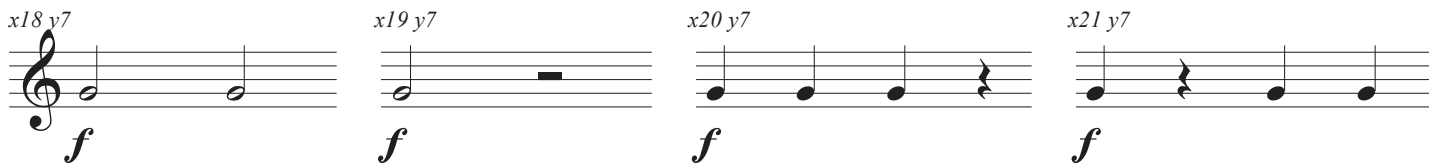
x31 y5
p

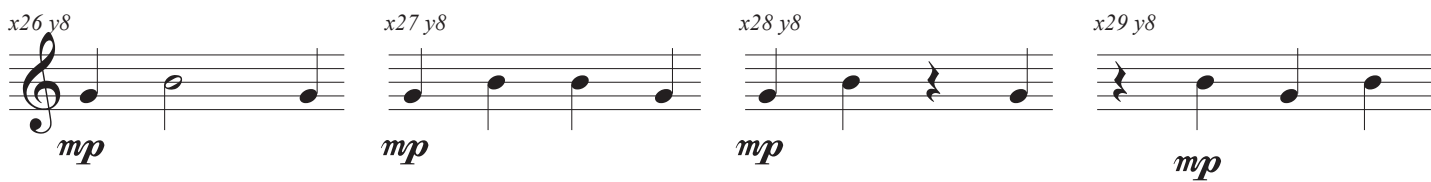
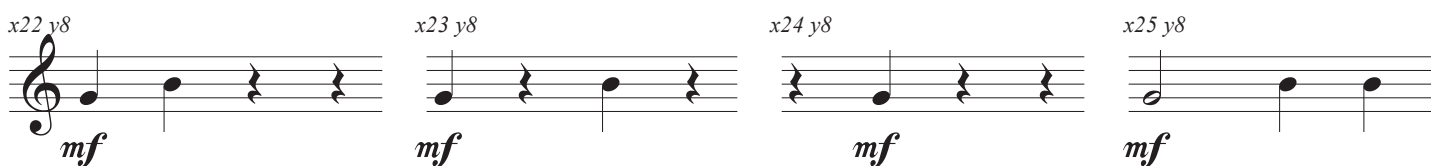
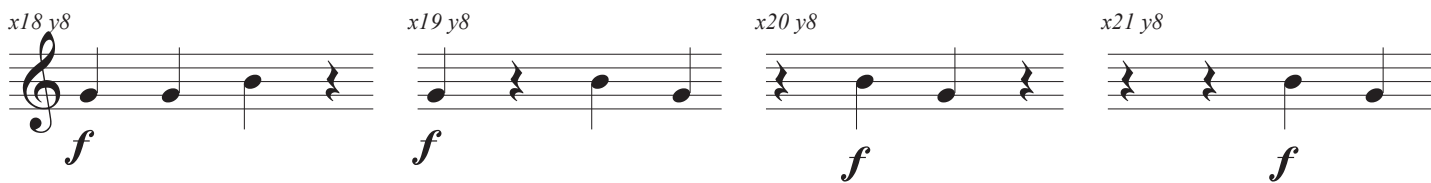
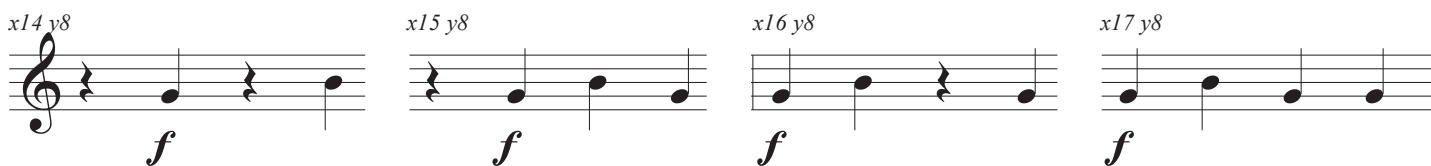
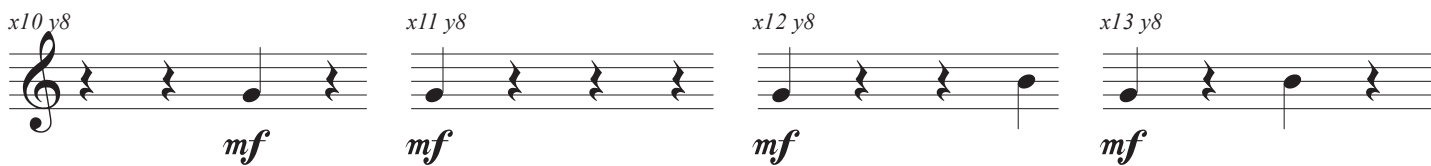
x32 y5
p

x33 y5
p

x34 y5
p







Handwritten musical notation on a grid of 40 staves, arranged in 8 rows and 5 columns. Each staff is labeled with a measure number and a dynamic marking.

Row 1:

- x1 y9 *p*
- x2 y9 *p*
- x3 y9 *p*
- x4 y9 *p*
- x5 y9 *p* *p*

Row 2:

- x6 y9 *mp*
- x7 y9 *mp*
- x8 y9 *mp*
- x9 y9 *mp*

Row 3:

- x10 y9 *mf*
- x11 y9 *mf*
- x12 y9 *mf*
- x13 y9 *mf*

Row 4:

- x14 y9 *f*
- x15 y9 *f*
- x16 y9 *f*
- x17 y9 *f*

Row 5:

- x18 y9 *f*
- x19 y9 *f*
- x20 y9 *f*
- x21 y9 *f*

Row 6:

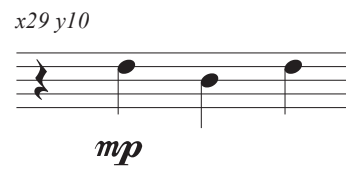
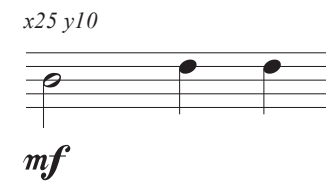
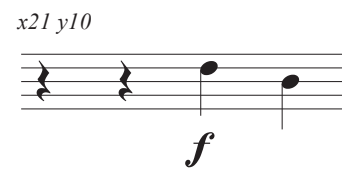
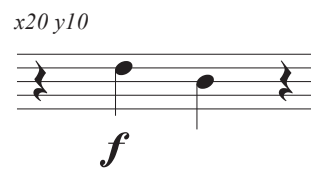
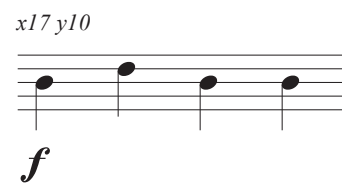
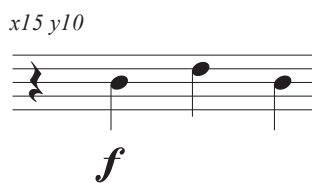
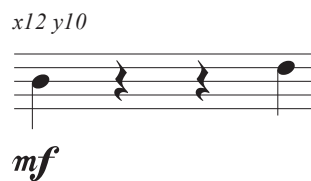
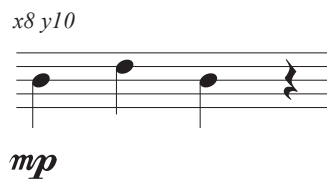
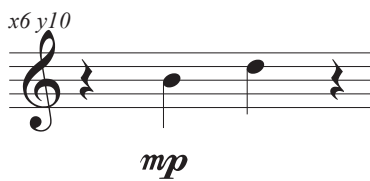
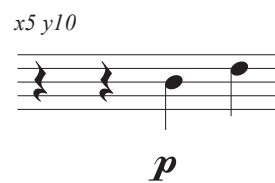
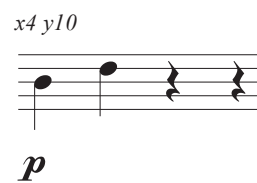
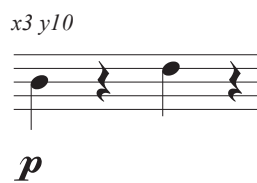
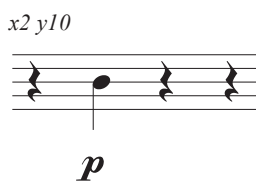
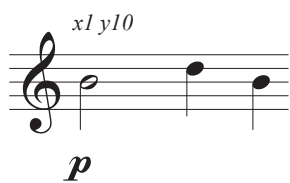
- x22 y9 *mf*
- x23 y9 *mf*
- x24 y9 *mf*
- x25 y9 *mf*

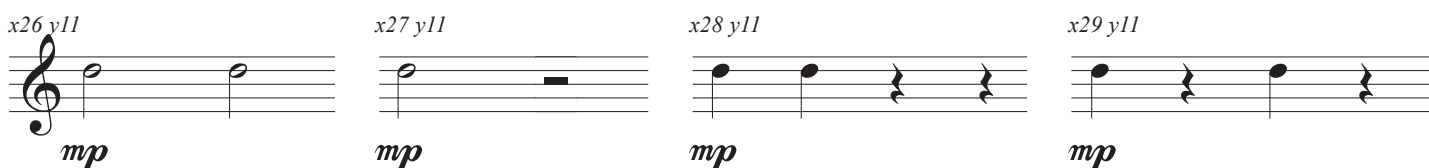
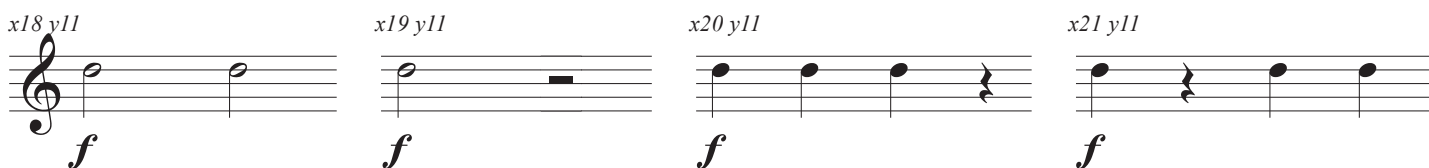
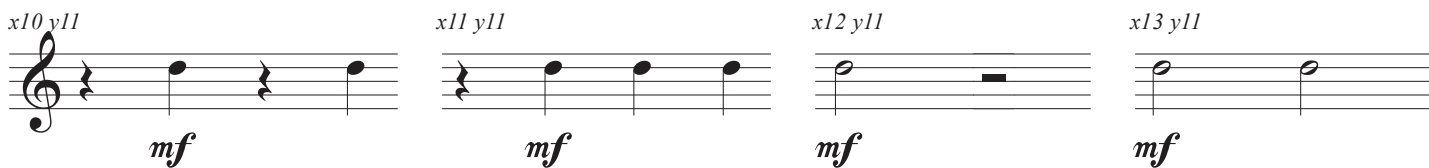
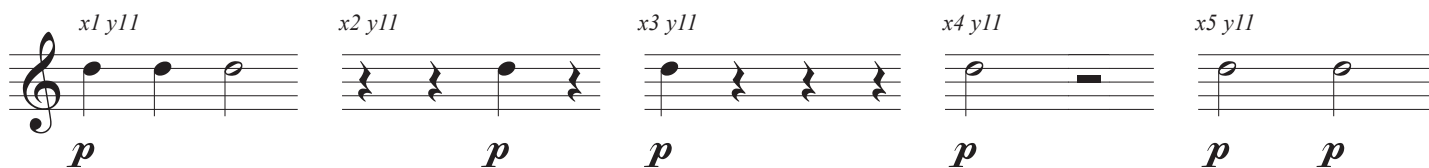
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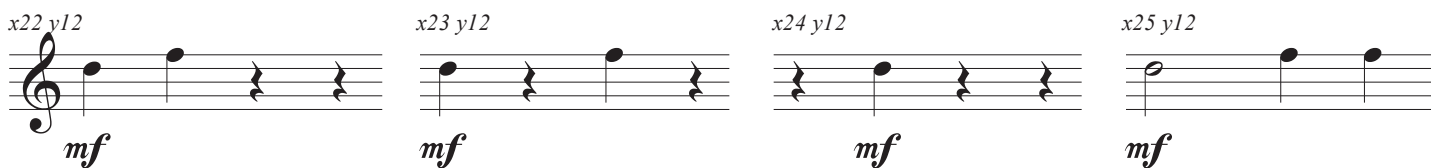
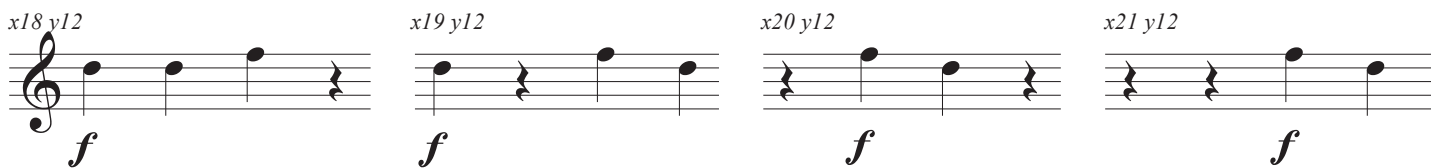
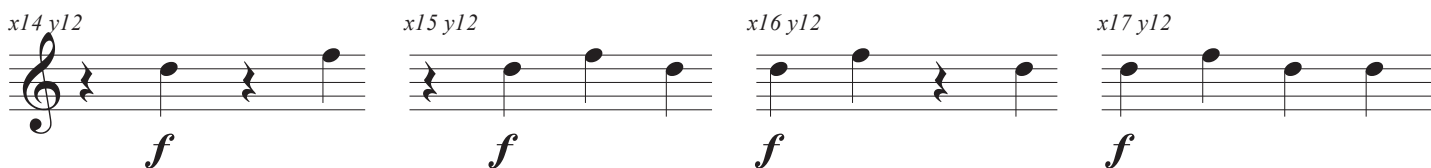
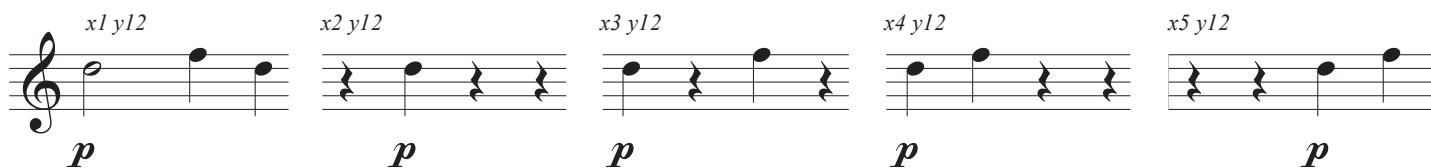
- x26 y9 *mp*
- x27 y9 *mp*
- x28 y9 *mp*
- x29 y9 *mp*

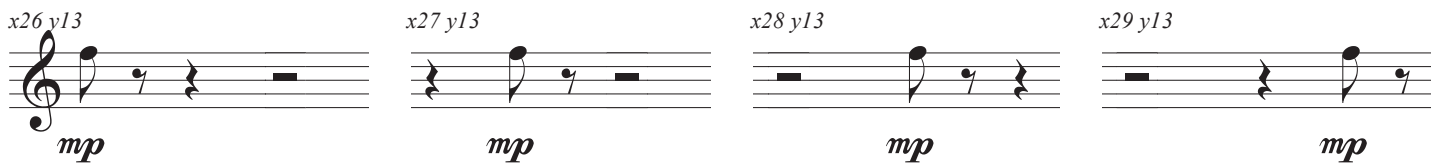
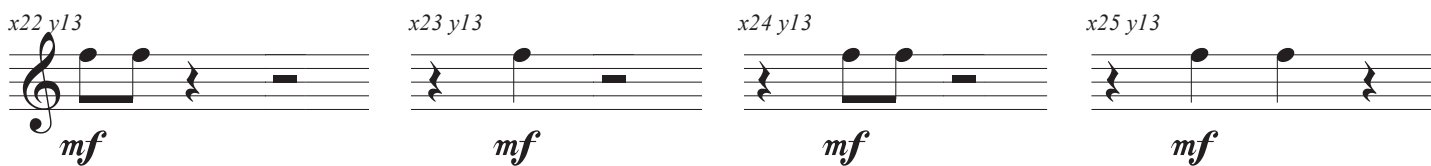
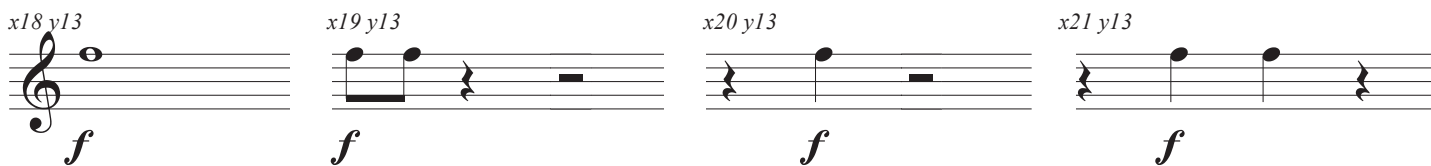
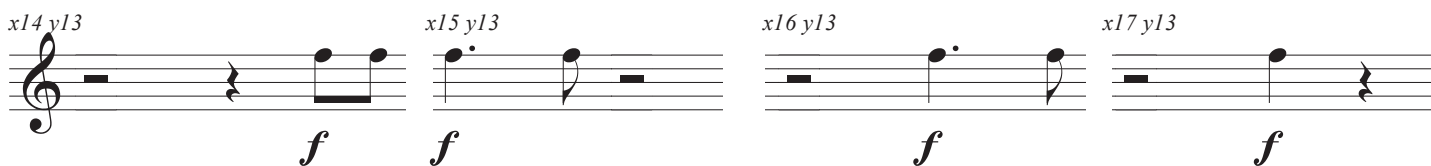
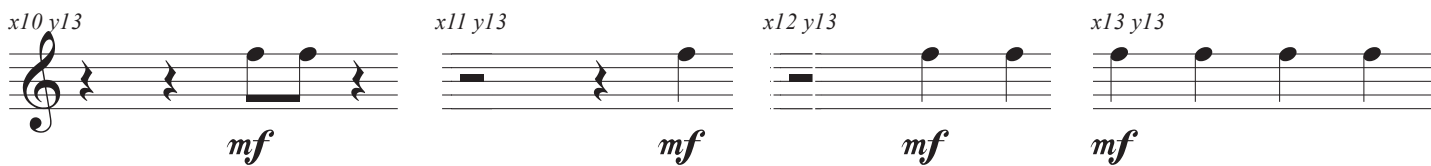
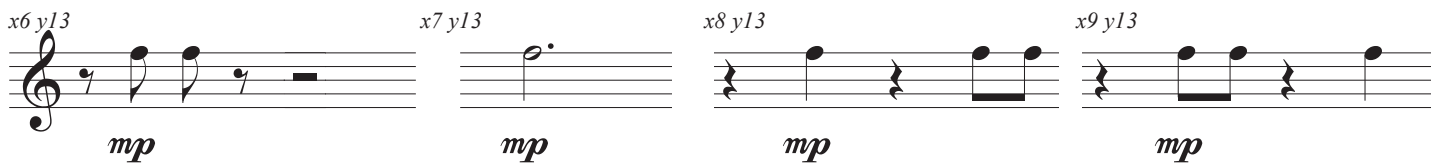
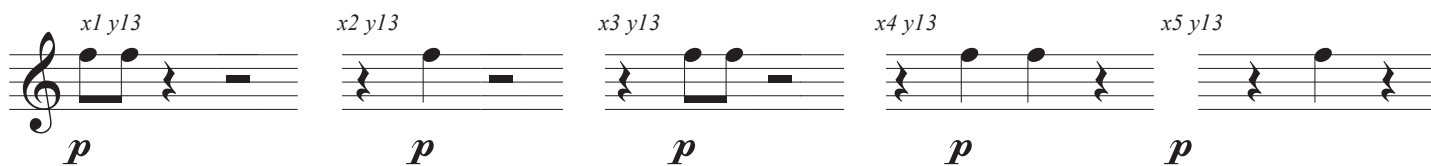
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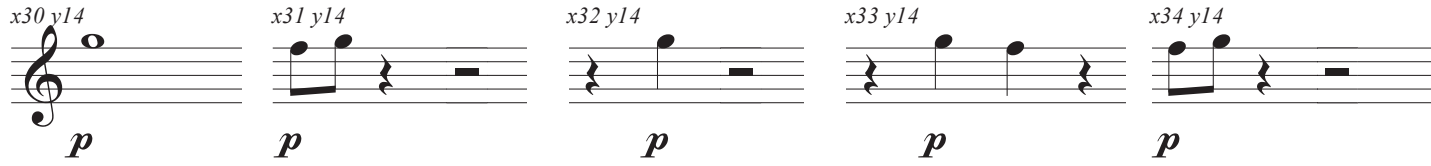
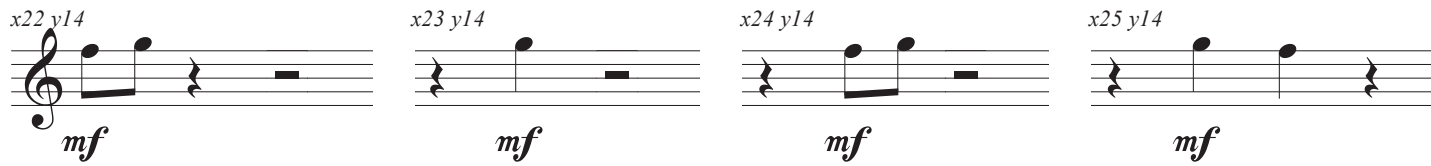
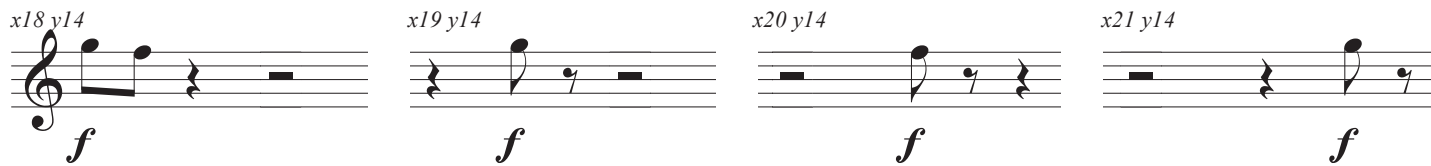
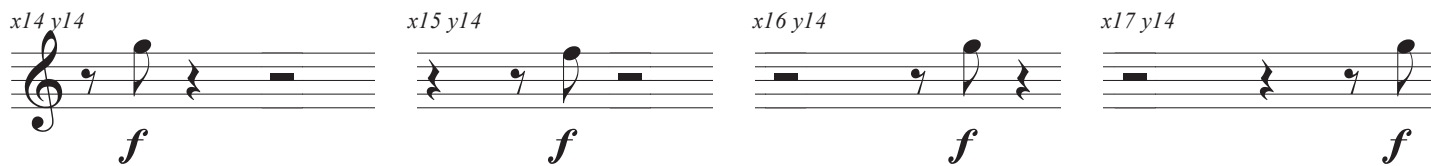
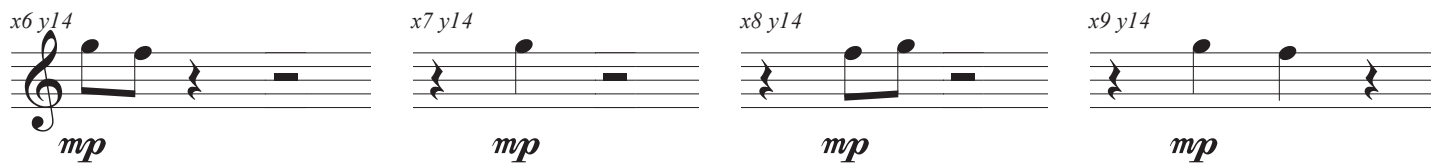
- x30 y9 *p*
- x31 y9 *p*
- x32 y9 *p*
- x33 y9 *p*
- x34 y9 *p*

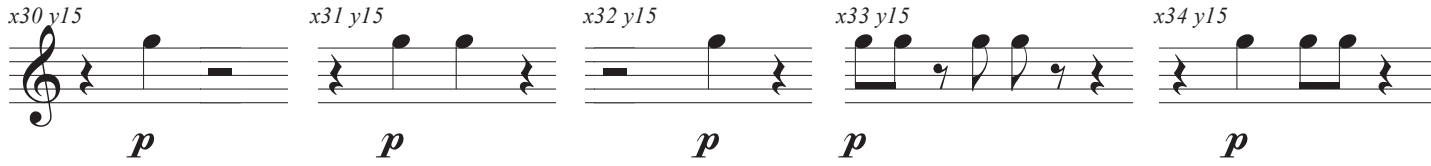
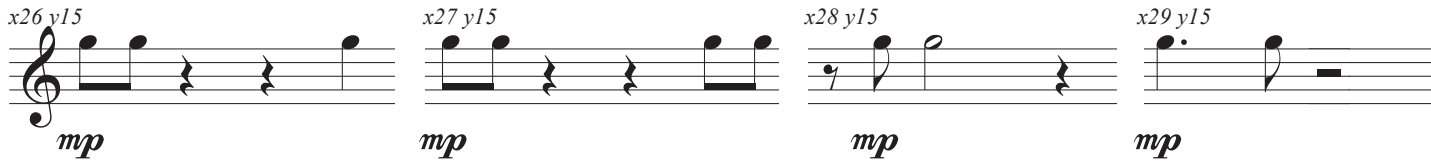
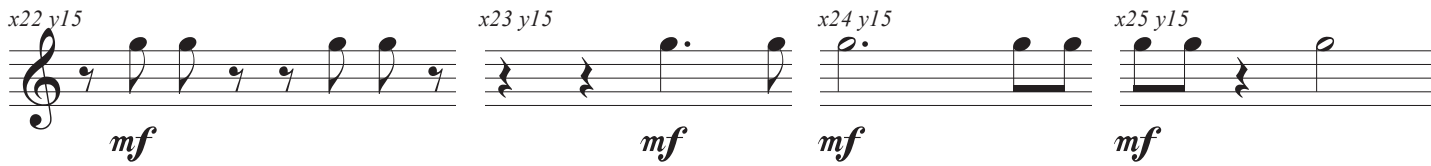
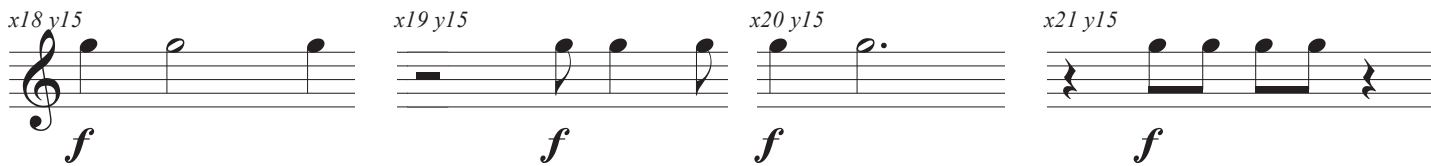
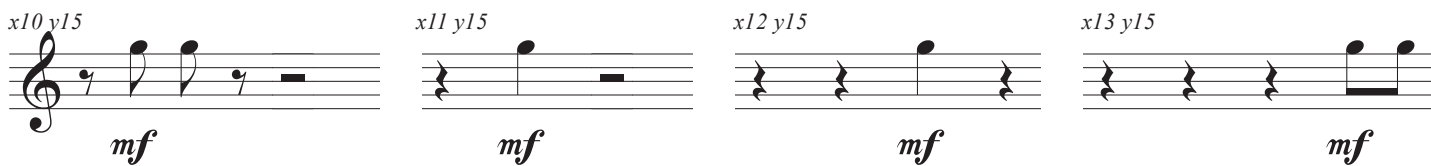
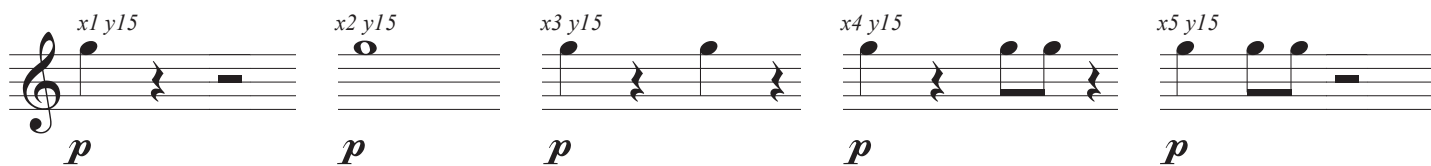












x1 y16 *x2 y16* *x3 y16* *x4 y16* *x5 y16*

p *p* *p* *p* *p*

x6 y16 *x7 y16* *x8 y16* *x9 y16*

mp *mp* *mp* *mp*

x10 y16 *x11 y16* *x12 y16* *x13 y16*

mf *mf* *mf* *mf*

x14 y16 *x15 y16* *x16 y16* *x17 y16*

f *f* *f* *f*

x18 y16 *x19 y16* *x20 y16* *x21 y16*

f *f* *f* *f*

x22 y16 *x23 y16* *x24 y16* *x25 y16*

mf *mf* *mf* *mf*

x26 y16 *x27 y16* *x28 y16* *x29 y16*

mp *mp* *mp* *mp*

x30 y16 *x31 y16* *x32 y16* *x33 y16* *x34 y16*

p *p* *p* *p* *p*

x1 y17
p

x2 y17
p

x3 y17
p

x4 y17
p

x5 y17
p

x6 y17
mp

x7 y17
mp

x8 y17
mp

x9 y17
mp

x10 y17
mf

x11 y17
mf

x12 y17
mf

x13 y17
mf

x14 y17
f

x15 y17
f

x16 y17
f

x17 y17
f

x18 y17
f

x19 y17
f

x20 y17
f

x21 y17
f

x22 y17
mf

x23 y17
mf

x24 y17
mf

x25 y17
mf

x26 y17
mp

x27 y17
mp

x28 y17
mp

x29 y17
mp

x30 y17
p

x31 y17
p

x32 y17
p

x33 y17
p

x34 y17
p

x1 y18
p

x2 y18
p

x3 y18
p

x4 y18
p

x5 y18
p

x6 y18
mp

x7 y18
mp

x8 y18
mp

x9 y18
mp

x10 y18
mf

x11 y18
mf

x12 y18
mf

x13 y18
mf

x14 y18
f

x15 y18
f

x16 y18
f

x17 y18
f

x18 y18
f

x19 y18
f

x20 y18
f

x21 y18
f

x22 y18
mf

x23 y18
mf

x24 y18
mf

x25 y18
mf

x26 y18
mp

x27 y18
mp

x28 y18
mp

x29 y18
mp

x30 y18
p

x31 y18
p

x32 y18
p

x33 y18
p

x34 y18
p

x1 y19 *x2 y19* *x3 y19* *x4 y19* *x5 y19*

p *p* *p* *p* *p*

x6 y19 *x7 y19* *x8 y19* *x9 y19*

mp *mp* *mp* *mp*

x10 y19 *x11 y19* *x12 y19* *x13 y19*

mf *mf* *mf* *mf*

x14 y19 *x15 y19* *x16 y19* *x17 y19*

f *f* *f* *f*

x18 y19 *x19 y19* *x20 y19* *x21 y19*

f *f* *f* *f*

x22 y19 *x23 y19* *x24 y19* *x25 y19*

mf *mf* *mf* *mf*

x26 y19 *x27 y19* *x28 y19* *x29 y19*

mp *mp* *mp* *mp*

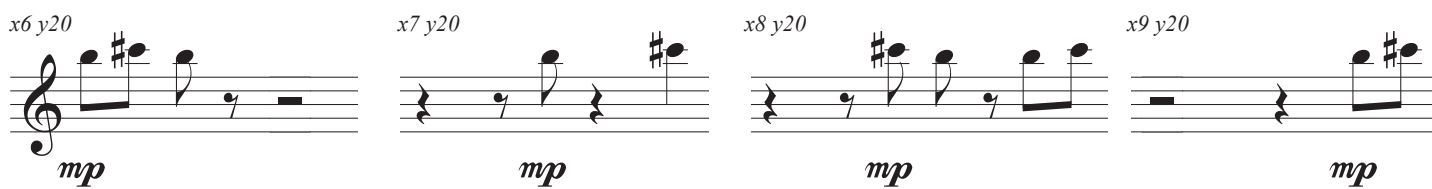
x30 y19 *x31 y19* *x32 y19* *x33 y19* *x34 y19*

p *p* *p* *p* *p*

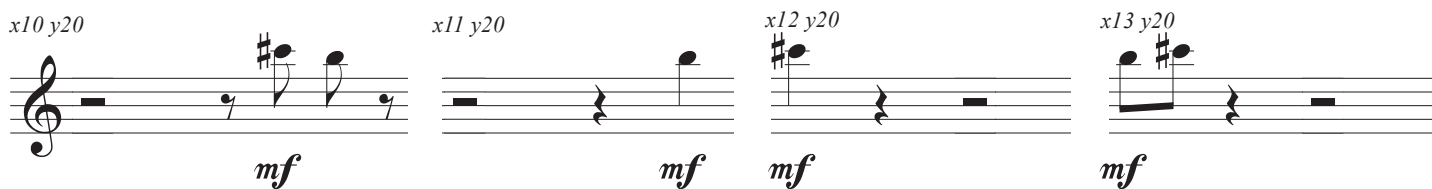
x1 y20 *p* *x2 y20* *p* *x3 y20* *p* *x4 y20* *p* *x5 y20* *p*



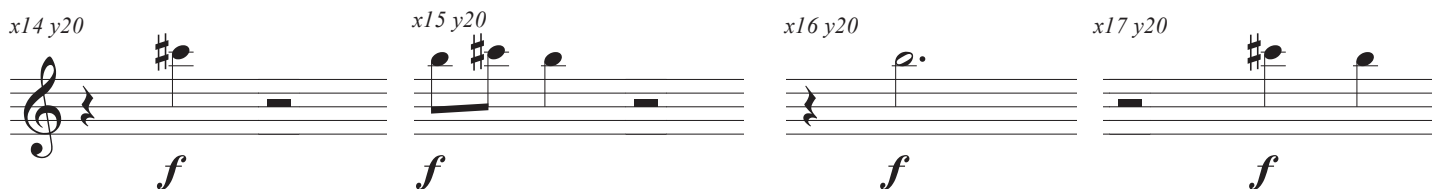
x6 y20 *mp* *x7 y20* *mp* *x8 y20* *mp* *x9 y20* *mp*



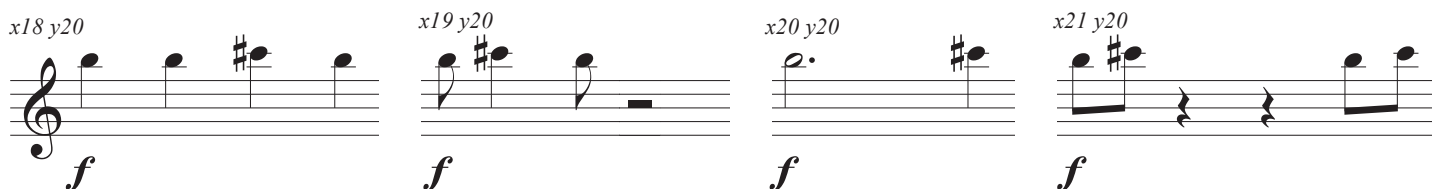
x10 y20 *mf* *x11 y20* *mf* *x12 y20* *mf* *x13 y20* *mf*



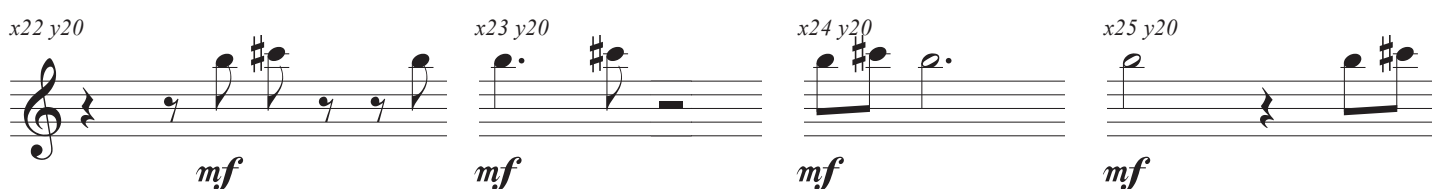
x14 y20 *f* *x15 y20* *f* *x16 y20* *f* *x17 y20* *f*




x18 y20 *f* *x19 y20* *f* *x20 y20* *f* *x21 y20* *f*



x22 y20 *mf* *x23 y20* *mf* *x24 y20* *mf* *x25 y20* *mf*

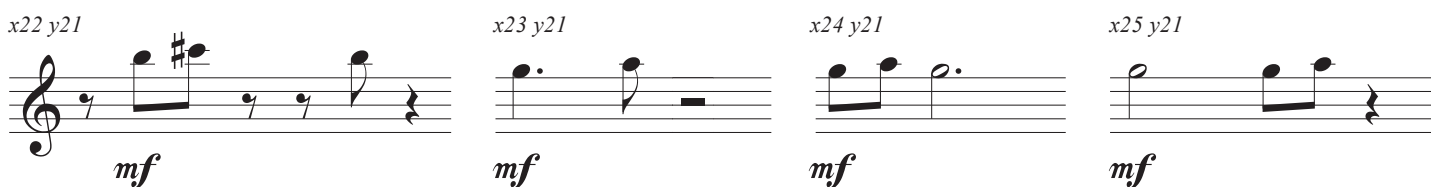
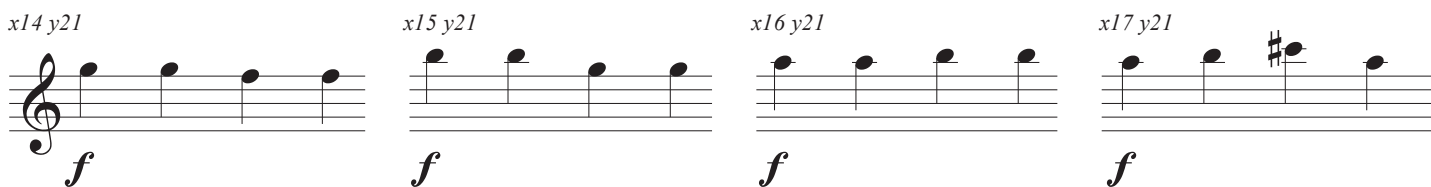
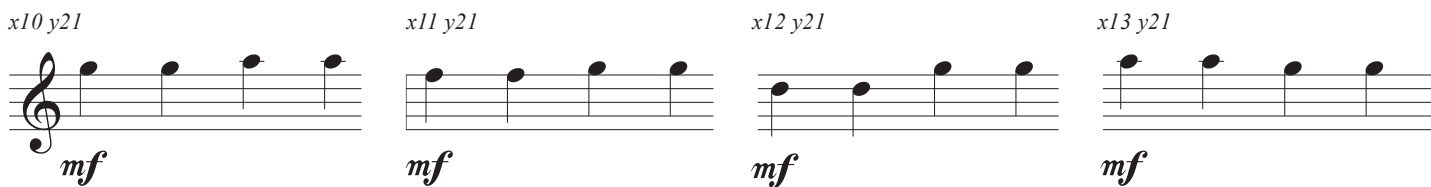
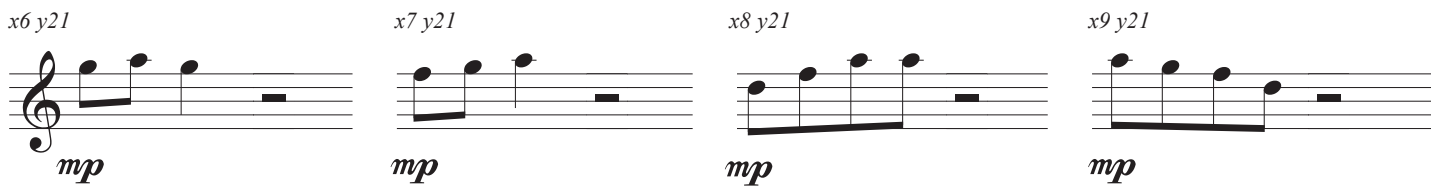
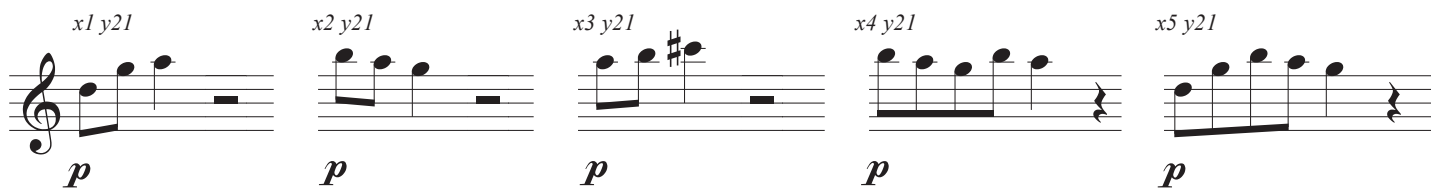


x26 y20 *mp* *x27 y20* *mp* *x28 y20* *mp* *x29 y20* *mp*



x30 y20 *p* *x31 y20* *p* *x32 y20* *p* *x33 y20* *p* *x34 y20* *p*





x1 y22 *x2 y22* *x3 y22* *x4 y22* *x5 y22*

p *p* *p* *p* *p*

x6 y22 *x7 y22* *x8 y22* *x9 y22*

mp *mp* *mp* *mp*

x10 y22 *x11 y22* *x12 y22* *x13 y22*

mf *mf* *mf* *mf*

x14 y22 *x15 y22* *x16 y22* *x17 y22*

f *f* *f* *f*

x18 y22 *x19 y22* *x20 y22* *x21 y22*

f *f* *f* *f*

x22 y22 *x23 y22* *x24 y22* *x25 y22*

mf *mf* *mf* *mf*

x26 y22 *x27 y22* *x28 y22* *x29 y22*

mp *mp* *mp* *mp*

x30 y22 *x31 y22* *x32 y22* *x33 y22* *x34 y22*

p *p* *p* *p* *p*

x1 y23 *x2 y23* *x3 y23* *x4 y23* *x5 y23*

p *p* *p* *p* *p*

x6 y23 *x7 y23* *x8 y23* *x9 y23*

mp *mp* *mp* *mp*

x10 y23 *x11 y23* *x12 y23* *x13 y23*

mf *mf* *mf* *mf*

x14 y23 *x15 y23* *x16 y23* *x17 y23*

f *f* *f* *f*

x18 y23 *x19 y23* *x20 y23* *x21 y23*

f *f* *f* *f*

x22 y23 *x23 y23* *x24 y23* *x25 y23*

mf *mf* *mf* *mf*

x26 y23 *x27 y23* *x28 y23* *x29 y23*

mp *mp* *mp* *mp*

x30 y23 *x31 y23* *x32 y23* *x33 y23* *x34 y23*

p *p* *p* *p* *p*

Handwritten musical score for guitar, featuring 34 measures (x1 y24 to x34 y24) across 8 staves. The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings.

Measures and Dynamics:

- x1 y24: *p*
- x2 y24: *p*
- x3 y24: *p*
- x4 y24: *p*
- x5 y24: *p*
- x6 y24: *mp*
- x7 y24: *mp*
- x8 y24: *mp*
- x9 y24: *mp*
- x10 y24: *mf*
- x11 y24: *mf*
- x12 y24: *mf*
- x13 y24: *mf*
- x14 y24: *f*
- x15 y24: *f*
- x16 y24: *f*
- x17 y24: *f*
- x18 y24: *f*
- x19 y24: *f*
- x20 y24: *f*
- x21 y24: *mf*
- x22 y24: *mf* (includes a triplet of eighth notes marked with a '3')
- x23 y24: *mf*
- x24 y24: *mf*
- x25 y24: *mp*
- x26 y24: *mp*
- x27 y24: *mp*
- x28 y24: *mp*
- x29 y24: *p*
- x30 y24: *p*
- x31 y24: *p*
- x32 y24: *p*
- x33 y24: *p*
- x34 y24: *p*

x1 y25 *p* x2 y25 *p* x3 y25 *p* x4 y25 *p* x5 y25 *p*

x6 y25 *mp* x7 y25 *mp* x8 y25 *mp* x9 y25 *mp*

x10 y25 *mf* x11 y25 *mf* x12 y25 *mf* x13 y25 *mf*

x14 y25 *f* x15 y25 *f* x16 y25 *f* x17 y25 *f*

x18 y25 *f* x19 y25 *f* x20 y25 *f* x21 y25 *f*

x22 y25 *mf* x23 y25 *mf*³ x24 y25 *mf* x25 y25 *mf*

x26 y25 *mp* x27 y25 *mp* x28 y25 *mp* x29 y25 *mp*

x30 y25 *p* x31 y25 *p* x32 y25 *p* x33 y25 *p* x34 y25 *p*