

Whole bows on each soundpoint, open strings

For the sound to be absolutely even, the factors which create it must be even. So the bow must stay on one soundpoint without drifting, and the speed and pressure must not fluctuate.

A

⑤ WB Tilted hair $\bullet = 80$ ④ Slightly less tilted $\bullet = 75$

p *mf*

③ Less tilted $\bullet = 70$ ② Flatter hair $\bullet = 60$ ① Flat hair $\bullet = 40$

f *ff* *f*

G

⑤ WB ④

p *mf*

③ ② ①

f *ff* *f*

D

⑤ WB ④

p *mf*

③ ② ①

f *ff* *f*

E

⑤ WB ④

p *mf*

③ ② ①

f *ff* *f*

Short bows on each soundpoint

Use short bows near the M, H and Pt. Adjust the exact length of bow to suit the soundpoint: nearer the fingerboard, more bow; nearer the bridge, less bow.
At slower metronome speeds use half bows in the M, UH and LH.

The exercises are organized as follows:

- Staff 1:**
 - Measure 1: ⑤ $\bullet = 130$, *pp* Tilted hair
 - Measure 2: ④ $\bullet = 120$, *p* Slightly less tilted
 - Measure 3: ③ $\bullet = 110$, *mf* Slightly less tilted
 - Measure 4: ② $\bullet = 100$, *f* Flat hair
- Staff 2:**
 - Measure 1: ② $\bullet = 100$, *f* Flat hair
 - Measure 2: ③ $\bullet = 110$, *mf* Slightly tilted
 - Measure 3: ④ $\bullet = 120$, *p* More tilted
 - Measure 4: ⑤ $\bullet = 130$, *pp* More tilted
- Staff 3:**
 - Measure 1: ⑤, *pp*
 - Measure 2: ④, *p*
 - Measure 3: ③, *mf*
 - Measure 4: ②, *f*
- Staff 4:**
 - Measure 1: ②, *f*
 - Measure 2: ③, *mf*
 - Measure 3: ④, *p*
 - Measure 4: ⑤, *pp*
- Staff 5:**
 - Measure 1: ⑤, *pp*
 - Measure 2: ④, *p*
 - Measure 3: ③, *mf*
 - Measure 4: ②, *f*
- Staff 6:**
 - Measure 1: ②, *f*
 - Measure 2: ③, *mf*
 - Measure 3: ④, *p*
 - Measure 4: ⑤, *pp*
- Staff 7:**
 - Measure 1: ⑤, *pp*
 - Measure 2: ④, *p*
 - Measure 3: ③, *mf*
 - Measure 4: ②, *f*
- Staff 8:**
 - Measure 1: ②, *f*
 - Measure 2: ③, *mf*
 - Measure 3: ④, *p*
 - Measure 4: ⑤, *pp*

Even strokes, changing bow-length

The more bow within the same time, the faster the bow-speed. The faster the bow-speed, the more weight is needed to engage the string.
In this exercise keep the quality and level of sound the same throughout each sequence, so that the 3 cm strokes and whole-bows sound more or less the same.

A

1st position

⑤ $\bullet = 120$
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
p

④ Slower
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
mp

③ Slower
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
f

② $\bullet = 90$
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
ff

5th position

④ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
p

③ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
mp

② M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
f

① M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
ff

1st position

⑤ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

p

④ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

mp

③ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

f

② M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

ff

5th position

④ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

p

③ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

mp

② M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

f

① M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

ff

Even strokes, changing bow-length

D

1st position

⑤
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
p

④
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
mp

③
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
f

②
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
ff

5th position

④
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
p

③
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
mp

②
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
f

①
M 3 cm More bow More bow More bow WB Less bow Less bow Less bow
ff

1st position

⑤ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

p + : + : + : + : - - -

④ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

mp + : + : + : + : - - -

③ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

f + : + : + : + : - - -

② M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

ff + : + : + : + : - - -

5th position

④ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

p + : + : + : + : - - -

③ M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

mp + : + : + : + : - - -

② M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

f + : + : + : + : - - -

① M 3 cm More bow More bow More bow WB Less bow Less bow Less bow

ff + : + : + : + : + : + :