**Intonation**

**Fast intonation**

In fast passages, sharps should often be played higher, and flats lower, than in slow passages. ‘Fast intonation’, with clearly exaggerated sharps and flats, sounds out of tune at a slow tempo. At a fast tempo, fast intonation sounds in tune and adds energy and colour. ‘Slow intonation’ (i.e. more tempered, like a piano, with lower sharps and higher flats) may sound dull and lack brilliance when played at a fast tempo.

- Playing at a slow tempo, exaggerate the sharps and flats. At speed this will come out sounding in tune. ‘↑’ = place higher than usual; ‘↓’ = place lower than usual.

:Filling in spaces between notes:

When the playing fingers are not consecutive (i.e. 1–3, 1–4, 2–4) the unused fingers in between can help in measuring the exact distance. For example, on the A string play second finger C to fourth finger E: as well as measuring the fourth finger from the second, picture the feeling of third finger D, and measure the fourth finger from the imagined third finger.

- Play the unused finger to confirm the feeling of its exact placement.
BASICS

- Play the passage once or twice with grace notes to focus on the relationship between the fingers.
- Then play without the grace notes. Picture the feeling of placing them on the string and place the actual fingers in relation to the imagined fingers.

Practising without rhythm or tone

One way to practise intonation is to strip away all other factors and concentrate only on the exact pitch of each note.

This is like practising tone production by playing one single, long note at a time. You can concentrate on the sound and the contact of the bow with the string without any questions of intonation, rhythm, co-ordination, vibrato, string-crossing, shifting, interpretation, and all the rest.

In the same way you can focus on intonation by excluding the two other main elements of playing – sound and rhythm.

- Play each note with equal tone and length, concentrating only on the exact tuning of each note.
- Play all down-bows, or all up-bows. This can be helpful in separating the notes from each other, so that there are no tonal, rhythmic or musical elements. Otherwise, most people find that after only a few notes you ‘forget’ what you are doing and start to play expressively again, and all the other factors of playing immediately return.
- Practise short phrases, passages or entire pieces in this way, checking and adjusting each note as necessary.

Afterwards, when you bring back all the other factors of playing, the intonation retains its security because you will be listening in a new way and your mental picture of each note will be clearer.