2nd or 3rd finger?

Tones and Semi-tones, and why we get confused... (Part 1)

We learnt - ages ago - that the notes are named after the first 7 letters of the alphabet



We also learnt – ages ago – that music is written on a stave (= the 5 lines / 4 spaces); that the stave works like a ladder, and that as the notes go up the ladder we simply need to just keep putting additional fingers (and vice versa)



When we start playing the cello, for most of the first year we'll typically just use our 1st, 3rd, and 4th fingers.

More recently perhaps, we learnt that there are things called Tones, and Semi-tones; these are the names given to the gaps between different notes; [and obviously, a **Semi**-tone gap is **half** the size of a Whole Tone]. All tunes are made of a mixture of Tones and Semi-tones, but when we play any stringed instrument, this isn't immediately obvious. After all, when you look at the notes on the stave, they're all the same vertical distance apart, right?

Sorry. They are, but they aren't. It's a lot easier to picture this if we look at a keyboard. We don't have to be able to PLAY it, fortunately. We can see that the keyboard has got a definite repeating pattern to it...



If we look closely we can see that each of the brackets has got 7 white notes within it.

This 7 note repeating pattern corresponds to the 7 letters of the alphabet.



But here's the thing...



Although the equally spaced notes on the stave appear to map neatly onto the [evenly spaced] white keys on the keyboard, we can see that whilst most of the white notes are separated by a black note, at two places on the keyboard, [E & F, and B & C] white notes sit right next to other white notes.

A semi-tone is the gap between any two ADJACENT notes on the keyboard. A Whole tone is 2 semitones.

So, **a Semi-tone** could either be a gap between a black note and a white note. But it can also be the gap between 2 white notes.



When playing any stringed instrument we use our left-hand fingers to stop a string vibrating over its full length. On the Cello, our fingers are placed an equal distance apart.

The relatively narrow gap between each of our fingers is **1 semi-tone**.

The wide gap between the end of the string & our 1st finger is a Whole tone.

Similarly, the gap between our first and third finger, is also a whole tone, [as is the gap between our 2nd and 4th].

NOW - play "Spot the difference" between the 2 set of notes, below

F# C# Violoncello D3 D1 D4 A A3 D A1 A4 The gap from D1 & D3 is a Whole Tone, You can see that the whole tone higher then D1 (E) is not an F (white note) but an EFGABCDE GABCD CDEF F GA F#. It's the same for A1 (B) & A3 (C#). Violoncello D E F G A В C D

However, where there are no sharps, the gap between the "E" and the "F" is only a semi-tone.

Easy! The top one has two Sharps, F# & C#.

note which is a

As we saw on the fingering photo, to play a semi-tone higher than our 1st finger, we need to use our 2nd finger. Once again, the same holds true for "B" & "C"; there's only a semi-tone gap – [white note sits next to another white note]. You will [of course] notice that the gap between "C" & "D" is now a Whole tone – which needs a 2^{nd} finger and a 4^{th} finger.

"So" (you may well be thinking) "All very interesting, but it doesn't really explain how we're supposed to quickly figure out when we should have it wide, or narrow"

If that WAS your thinking, award yourself a treat, 'cos you're dead right.

That essential chunk of knowledge is in part 2....

