

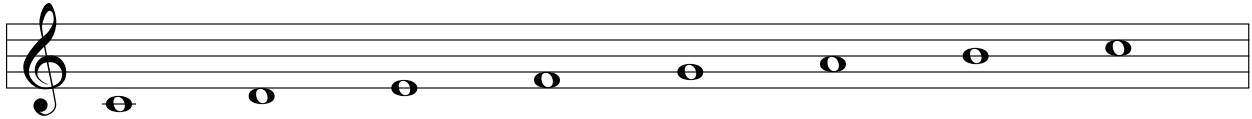
Unit 7 ~ Minor Scales

In unit 5 we learned about **major** scales. The other type of scale we need to learn about is the **minor** scale.

How do we build a minor scale?

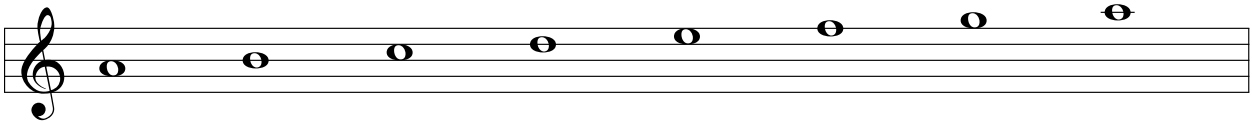
Minor scales use the same keys signatures that major scales use, but they start on different notes. Each major scale has a relative minor scale that uses the same key signature, but starts a 3rd lower. Let's look at an example.

Here is C major. Note that the key signature is blank - there are no sharps or flats in C major:

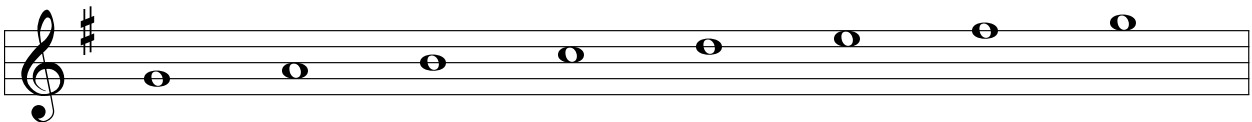


Now if we start on C and count down 3 notes (counting C as "1"), then we get to A. So, **A Minor** is the relative minor of C major, and uses the same key signature:

A Minor:



Here's another example. This is G major:



If we count down 3 notes from G, we get to E, so E minor is the relative minor of G major:

E Minor:

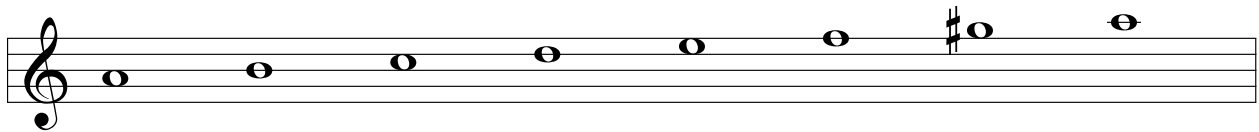


Now, there are actually three types of minor scale!

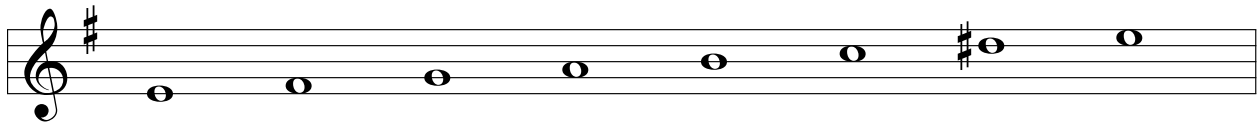
The ones shown above are **Natural Minor** scales. This form was used a lot in the Middle Ages and Renaissance. As time went on and we got into the Baroque and Classical eras, composers started raising the 7th scale step by 1 semitone.

This resulted in what we now call the **Harmonic Minor Scale**. Here are the 2 natural minor scales above, now converted into harmonic minors by raising the 7th degree.

A Harmonic Minor:



E Harmonic Minor:



The main thing to notice here is that we raised the 7th scale degree with an accidental. In these scales we used a sharp. In some scales/key signatures a natural is used.

We call this scale the "harmonic minor" because we use it to build chords in minor keys. We'll discuss this more fully in the next unit.

Recall from unit 5 the order of tones and semitones in a major scale: T-T-S-T-T-T-S

And the order of tones and semitones in the **natural** minor scale is: T-S-T-T-S-T-T

Now how about the **harmonic** minor? This is hard to do because of the pesky interval between the 6th and 7th degrees. This isn't a semitone or a tone. It's actually an augmented 2nd, which is 3 semitones! That's right, take a look at those scales above again.

In the A minor scale, the interval from F to G# is an augmented 2nd, or 3 semitones. The same is true of the C to D# in the E minor scale.

This augmented 2nd is a bit like a speed bump. It can be challenging to play or sing the scale smoothly, especially at any speed.

To solve the problem of the speed bump, composers came up with the **Melodic Minor Scale**. To build a melodic minor, we raise TWO notes going up - the 6th and the 7th degrees, and then we lower them again going down. So this scale actually has two forms, the ascending form and the descending form (the descending form has exactly the same notes as the natural minor).

A Melodic Minor:



Here is **D Melodic Minor**, which is the relative minor of F major, and so has the same key signature:



This form of the minor scale is a little easier to play smoothly. Presumably it's called the melodic minor because this smoothness makes it better for melodies than the bumpy harmonic minor.

To summarize:

- ~Each major scale has a relative minor that uses the same key signature but starts a 3rd lower
- ~There are three types of minor scale
- ~The natural minor scale has no added accidentals
- ~The harmonic minor has a raised 7th scale degree
- ~The melodic minor has the 6th and 7th raised going up, and then lowered again going down.

Key Signatures of the Major Scales and their Relative Minors

No accidentals:

C major	A minor
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Sharp keys:

1 sharp: G major	E minor
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2 sharps: D major	B minor
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3 sharps: A major	F# minor
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4 sharps: E major	C# minor
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5 sharps: B major	G# minor
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6 sharps: F# major	D# minor
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7 sharps: C# major	A# minor
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Flat keys:

1 flat: F major	D minor
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2 flats: Bb major	G minor
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3 flats: Eb major	C minor
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4 flats: Ab major	F minor
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5 flats: Db major	Bb minor
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6 flats: Gb major	Eb minor
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7 flats: Cb major	Ab minor
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