Section 2.1

Major Scales

C major scale  The white piano keys from C to C form a C major scale. These eighth notes (C, D, E, F, G, A, B, and then C again) divide into two four-note scale segments called tetrachords:

\[
\begin{array}{cccccccc}
C & D & E & F & G & A & B & C \\
\hline
\text{whole} & \text{whole} & \text{half} & \text{whole} & \text{whole} & \text{whole} & \text{half} \\
\text{lower tetrachord} & \text{upper tetrachord}
\end{array}
\]

Major tetrachord  The lower tetrachord and the upper tetrachord each follow the major tetrachord pattern: W-W-h, with a whole step between them. To visualize the whole step/half step pattern shown above, review 1.2 The Chromatic Scale and the Piano. Remember that E to F and B to C are natural half steps (no accidentals needed).

Key of C major  A piece of music that uses the C major scale for its melodies and harmonies is in the key of C major. The major scale can also start on notes other than C, as long as it follows the correct pattern of whole steps and half steps: W-W-h, then W, then W-W-h again. A G major scale requires F sharp to create the E-F sharp whole step, since E to F is a natural half step.

G major scale  

\[
\begin{array}{cccccccc}
G & A & B & C & D & E & F# & G \\
\hline
\text{W} & \text{W} & \text{h} & \text{W} & \text{W} & \text{W} & \text{h} \\
\text{lower tetrachord} & \text{upper tetrachord}
\end{array}
\]

Key signature  A key signature indicates the accidentals for the key at the start of each line of music instead of next to each note.

G major key signature  The sharp is in the key signature, so we don't need it here.
**D major scale**  
G is the fifth scale note in C major, and the G major scale has one more sharp than C major. Changing the key to the fifth scale note of a particular scale **always** adds a sharp (or takes away a flat). Since D is the fifth scale note of G (G, A, B, C, D), the D major scale uses two sharps. The added sharp is always **one scale note below the new key**.

![D major key signature](image)

**A major**  
Continuing “up 5, add a sharp,” A major has **three** sharps, E major has **four**, and so on. Again, the new sharp in the key signature is always **one scale note below the new key**.

![A major key signature](image)

**E major**  
Similarly, counting **down five scale notes** takes away a sharp (or adds a flat). For instance, C, B, A, G, F = 1, 2, 3, 4, 5. Since F is the fifth scale note down starting from C, F major has one more flat than C major. All flat keys follow the same pattern: counting down five scale notes adds a flat.

![F major key signature](image)