

| Note # (88-key piano) |    | MIDI Note | Note | Octave | Frequency (Hz) | Wavelength (ft) | Wavelength (in) | Synthesizer | Piano | Pipe Organ | Accordion | Voice: Bass | Voice: Baritone | Voice: Tenor | Voice: Alto | Voice: Soprano | Bass Guitar | Guitar | Cello | Violin | Bass Drum | Timpani | Toms | Cymbals | Bb Bass Tuba | Bb Trombone | F French Horn | Trumpet / Coronet | Bassoon | Bb Bass Clarinet | Bb soprano Clarinet | Bb Bass Saxophone | Bb Tenor Saxophone | Bb Soprano Saxophone | Oboe | Flute | Comments |  |
|-----------------------|----|-----------|------|--------|----------------|-----------------|-----------------|-------------|-------|------------|-----------|-------------|-----------------|--------------|-------------|----------------|-------------|--------|-------|--------|-----------|---------|------|---------|--------------|-------------|---------------|-------------------|---------|------------------|---------------------|-------------------|--------------------|----------------------|------|-------|----------|--|
|                       | 12 | C         |      | 0      |                |                 |                 | 0           |       |            |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
|                       | 13 | C# - Db   |      | 0      |                |                 |                 | 0           |       |            |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
|                       | 14 | D         |      | 0      |                |                 |                 | 0           |       | 0          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
|                       | 15 | D# - Eb   |      | 0      |                |                 |                 | 0           |       | 0          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
|                       | 16 | E         |      | 0      |                |                 |                 | 0           |       | 0          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
|                       | 17 | F         |      | 0      |                |                 |                 | 0           |       | 0          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
|                       | 18 | F# - Gb   |      | 0      |                |                 |                 | 0           |       | 0          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
|                       | 19 | G         |      | 0      |                |                 |                 | 0           |       | 0          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
|                       | 20 | G# - Ab   |      | 0      |                |                 |                 | 0           |       | 0          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 1                     | 21 | A         |      | 0      | 27.5000        | 40.95           | 491.35          | 1           | 1     | 1          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 2                     | 22 | A# - Bb   |      | 0      | 29.1352        | 38.65           | 463.77          | 2           | 2     | 2          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 3                     | 23 | B         |      | 0      | 30.8677        | 36.48           | 437.74          | 3           | 3     | 3          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 4                     | 24 | C         |      | 1      | 32.7032        | 34.43           | 413.17          | 4           | 4     | 4          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 5                     | 25 | C# - Db   |      | 1      | 34.6478        | 32.50           | 389.98          | 5           | 5     | 5          |           |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 6                     | 26 | D         |      | 1      | 36.7081        | 30.67           | 368.09          | 6           | 6     | 6          |           |             |                 |              |             |                | 6           |        |       |        |           |         |      |         | 6            |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 7                     | 27 | D# - Eb   |      | 1      | 38.8909        | 28.95           | 347.43          | 7           | 7     | 7          |           |             |                 |              |             |                | 7           |        |       |        |           |         |      |         | 7            |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 8                     | 28 | E         |      | 1      | 41.2034        | 27.33           | 327.93          | 8           | 8     | 8          |           |             |                 |              |             |                | 8           |        |       |        |           |         |      |         | 8            |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 9                     | 29 | F         |      | 1      | 43.6535        | 25.79           | 309.53          | 9           | 9     | 9          | 9         |             |                 |              |             |                | 9           |        |       |        |           |         |      |         | 9            |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 10                    | 30 | F# - Gb   |      | 1      | 46.2493        | 24.35           | 292.16          | 10          | 10    | 10         | 10        |             |                 |              |             |                | 10          |        |       |        |           |         |      |         | 10           |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 11                    | 31 | G         |      | 1      | 48.9994        | 22.98           | 275.76          | 11          | 11    | 11         | 11        |             |                 |              |             |                | 11          |        |       |        |           |         |      |         | 11           |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |
| 12                    | 32 | G# - Ab   |      | 1      | 51.9131        | 21.69           | 260.28          | 12          | 12    | 12         | 12        |             |                 |              |             |                |             |        |       |        |           |         |      |         |              |             |               |                   |         |                  |                     |                   |                    |                      |      |       |          |  |