

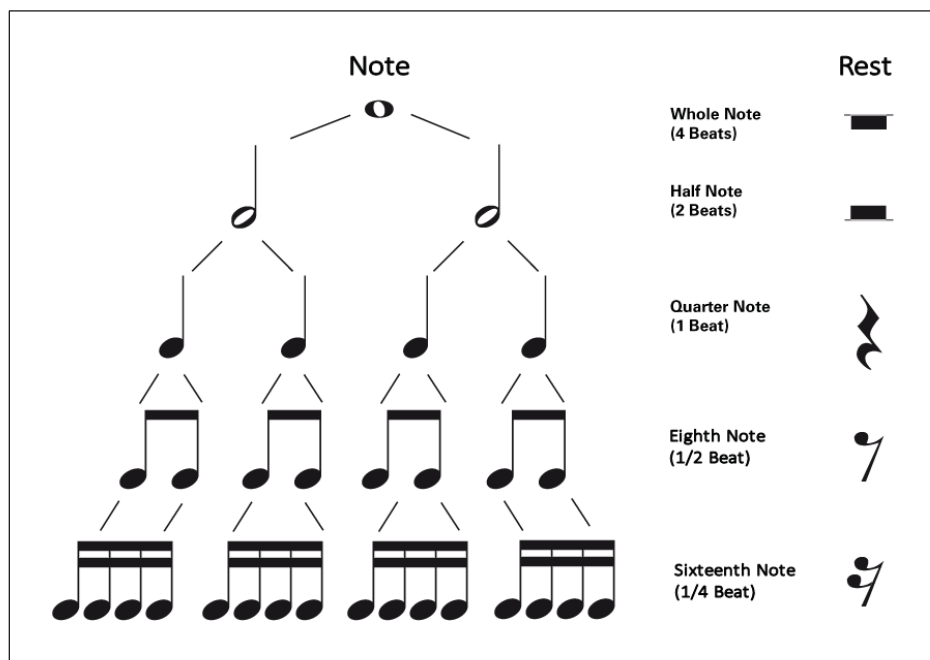


# Teaching a Computer to Sing

University of Massachusetts Lowell  
Bartlett Community Partnership School



## Understanding Note and Rest Values, Ties, and Dotted Note Values



### ABC Notation

A4	whole note (4 beats)	z4	whole rest (4 beats)
A2	half note (2 beats)	z2	half rest (2 beats)
A or A1	quarter note (1 beat)	z or z1	quarter rest (1 beat)
A/ or A/2	eighth note (1/2 beat)	z/ or z/2	eighth rest (1/2 beat)
A/4	sixteenth note (1/4 beat)	z/4	sixteenth rest (1/4 beat)

## Understanding Ties

A *tie* indicates that note values are to be added together and held as a single note.

A musical staff in 4/4 time with a treble clef. The notes and their durations are: a quarter note (1/2 beat), a pair of beamed eighth notes (1 beat), another pair of beamed eighth notes (1 beat), and a pair of beamed eighth notes with a tie over the second note (2 1/2 beats). The word "Beats" is written below the staff, with the values 1/2, 1, 1, and 2 1/2 aligned under their respective notes.

### ABC Notation for This Example

A/2 (A/2A/2) (B/2B/2) (C/2 | C2) z2 |

## Understanding Dotted Notes

A *dot* after a note indicates that the value of that note is increased by 1/2. Thus a dotted quarter note has 1 1/2 beats instead of 1, and a dotted quarter note has 3/4 beat instead of 1/2.

A musical staff in 4/4 time with a treble clef. The notes and their durations are: a quarter note (1/2 beat), a dotted quarter note (1 1/2 beats), a half note (2 beats), a dotted quarter note (3/4 beat), and an eighth note (1/2 beat). The word "Beats" is written below the staff, with the values 1/2, 1 1/2, 2, 3, and 1 aligned under their respective notes.

### ABC Notation for This Example

A/2 A3/ C'2 | G3 z |