Classifications of Woodwinds

I. By Families
A. The Flute Family: piccolo, flute, alto flute, bass flute.
B. The Oboe Family: oboe, oboe d'amore, English horn, heckelphone, bassoon, contrabassoon.
C. The Clarinet Family: C, D, Eb, Bb, and A clarinets, Eb alto clarinet, bass clarinet, Bb and Eb contrabass clarinets, basset horn.
D. The Saxophone Family: sopranino, soprano, alto, tenor, baritone, bass
E. The Flageolet Family (recorders): sopranino, soprano, alto, tenor, bass

II. By Reeds
A. Single Reeds: clarinets, saxophones
B. Double Reeds: oboes, bassoons
C. Nonreeds: flutes, recorders

III. By Shape of the Pipe
A. Cylindrical Tubing: clarinet (closed), flute (open)
B. Conical Tubing: oboes, bassoons, saxophones

IV. By Overblowing
A. All conical pipe instruments overblow at the octave.
B. All clarinets overblow at the 12th.

V. By Transposition

The Basic Principal of Transposition

When an instrument plays a written C it will sound the pitch in which the instrument is pitched. For example, if a Bb clarinet plays a written C, the sounding pitch will be a Bb which is the key in which the instrument is pitched. Likewise, if the English horn (pitched in F) plays a written C, it will sound an F. One must also determine the correct octave that the sounding pitch appears. One thing to remember is that the piccolo and the Eb clarinet are the only two woodwinds that transpose from the written pitch upwards (piccolo up an octave; Eb clarinet up a minor 3rd). All others transpose from the written pitch downwards. Of this latter group, the woodwinds that transpose down from the written pitch an octave or more are the bass clarinet (M9), contrabassoon (P8), Bb tenor saxophone (M9), Eb baritone saxophone (M13), bass flute (P8), Bb contrabass clarinet (M16), and the Bb bass saxophone (M16).

Hints for Scoring Woodwinds

(1) Check the ranges of the music. The soprano melody may be too low to allow the flute to speak above the other instruments.
(2) The bassoon will normally take the lowest voice.
(3) Make sure the register of each part is played by an instrument which will speak effectively. Double the voice and/or thin the accompaniment if an instrument plays in a weak register.
(4) Mind the oboe's "cutting" tone. If it is given a secondary role it will stand out.
(5) Avoid writing Perfect 4ths in the oboe. The oboe's color accentuates the "bareness" of the P4th.
The Woodwind Section: Notation

1. Each pair of woodwinds is written on the same staff. The upper instrument of the pair will be written with upward stems. The lower instrument of the pair will be written with downward stems. This relationship continues even if the parts cross momentarily.
2. If the rhythm is identical in a pair, a single stem may be used for both notes. If just one rhythmic value is different in a measure you should use separate stems.
3. Mark whether a passage is to be played by the 1st (I.) or 2nd (II.) or both (a2) when necessary. a2 is used when there is a single line of music and both instruments play that line.
4. If a pair of winds divides, ties, dynamics, and articulations for the upper instrument go above the staff, while ties, dynamics, and articulations for the lower instrument go below.
5. Use "solo" for solo passages.
6. Use "soli" if both in the pair perform the same passage.
7. All notes will be tongued (articulated) if slurs aren’t used.

Example:

![Example](image)

The High School Orchestra = 1 piccolo, 2 flutes, 2 oboes, 2 Bb clarinets, 2 bassoons

Conventional Scoring Example for Woodwinds in Tutti Sections
[also showing score order]  

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piccolo</td>
<td>Soprano up one octave</td>
</tr>
<tr>
<td>Flute</td>
<td>Soprano up one octave</td>
</tr>
<tr>
<td>Oboes</td>
<td>Alto up one octave</td>
</tr>
<tr>
<td>English horn</td>
<td>Tenor up one octave</td>
</tr>
<tr>
<td>Eb Clarinet</td>
<td>Soprano up one octave</td>
</tr>
<tr>
<td>Bb Clarinet I</td>
<td>Alto up one octave</td>
</tr>
<tr>
<td>Bb Clarinet II</td>
<td>Tenor up one octave</td>
</tr>
<tr>
<td>Bb Clarinet III</td>
<td>Soprano</td>
</tr>
<tr>
<td>Bass Clarinet</td>
<td>Bass</td>
</tr>
<tr>
<td>Bassoons</td>
<td>B</td>
</tr>
<tr>
<td>Eb Alto Sax I</td>
<td>S</td>
</tr>
<tr>
<td>Eb Alto Sax II</td>
<td>A</td>
</tr>
<tr>
<td>Bb Tenor Sax</td>
<td>T</td>
</tr>
<tr>
<td>Eb Baritone Sax</td>
<td>B</td>
</tr>
</tbody>
</table>