Instrumentation:
- 1 piccolo
- 2 flutes
- 2 oboes
- 2 Bb clarinets
- 2 bassoons
- 4 F horns
- 2-3 Bb trumpets
- 2-3 trombones
- 1 tuba
timpani (4)
percussion
strings

• Likely to be missing from this list are the 2nd oboe, 2nd bassoon, 3rd and 4th horns. If these instruments are available, the players will likely be inexperienced. Therefore, the parts written for these instruments should be doubled by other instruments. This is also true of the viola section. - There is strength in numbers!
• If you write a solo for oboe, bassoon, or horn, make sure you “cue” the solo in another part to be assured that it will be played.

GENERAL SCORING HINTS FOR SECTIONS:

Woodwinds:
- use sufficient rests - young players breathing powers are not fully developed.

Brass:
- the horns are written in two parts (I and II as a rule), with two players per part.
- avoid entrances on high notes.
- trombones use bass clef.

Percussion:
- use 4 timpani (avoid fast retunings of the drums).
- vibraphone is scarce and should not be used.

Harp, Celesta, and Piano:
- Harp is used more frequently in High Schools.
- Celesta parts will be played on the piano.
- Piano takes a utilitarian role.

Strings:
- do not use double stops (if you must, utilize an open string).
- use divisi sparingly (not at all for the violas).
From the textbook (pg. 355):
The following graph is intended for an orchestra in which the instrumentation is constantly changing.

Table 19.1 from Kennan

<table>
<thead>
<tr>
<th>MELODY</th>
<th>UPPER REGISTER HARMONY PARTS</th>
<th>MIDDLE REGISTER HARMONY PARTS</th>
<th>BASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>flute</td>
<td>(clarinet 1?)</td>
<td>horns</td>
<td>bassoon</td>
</tr>
<tr>
<td>oboe</td>
<td>clarinet 2</td>
<td>violin 2</td>
<td>trombone</td>
</tr>
<tr>
<td>clarinet 1</td>
<td>(and/or violin II)</td>
<td>(and/or clarinet 2)</td>
<td>celloes</td>
</tr>
<tr>
<td>trumpet 1</td>
<td>trumpet 2</td>
<td>violas</td>
<td>basses</td>
</tr>
<tr>
<td>violin 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- the SATB setup allows reductions for smaller groups to be made easily.
- insures plenty of volume for each voice when needed.
- eliminates the writing of cues.
- allows maximum number of possibilities in making substitutions.
- heavy doubling of constantly mixed tone becomes monotonous.
- since the arrangement must be made to accommodate playability for all the instruments on a given part (i.e. S,A,T, or B), the instruments cannot be used in their most interesting or effective manner.