Tune The Instrument

1) Tune with the neck joint then the mouthpiece.
2) Tune with the middle joint if possible.
3) Tune with the bell joint.

Intonation Discrepancies - Bad Notes - Natural Tendencies

Causes and Remedies for Bad Notes

Reeds - Hard reeds generally cause sharpness.
- Soft reeds generally cause flatness.
- Soft reeds generally emphasize natural tendencies

Embouchure - Check the angle held for the best tone.
- Too little mouthpiece in the mouth may emphasize overall flatness of high register.
- Too much mouthpiece in the mouth may emphasize overall flatness.

Mouthpiece - Closer mouthpiece lays tend to be sharper than open mouthpiece lays.

Dynamics - Crescendos may blow flat.
- Diminuendos may blow sharp.
- Make all dynamic changes by blowing air faster and slower.
- To overcome flatness on crescendos:
  Drop lower jaw slightly.
  Maintain breath support while increasing the velocity of air stream.
  Increase lower lip pressure slightly.
- To overcome sharpness on diminuendos.
  Maintain breath support while decreasing the velocity of air stream.
  Relax the embouchure slightly in lower jaw and lower lip.

Range - Low register is often flat.
- High register is often sharp.
- When playing notes above High C do not lift the index finger of your left hand. Simply slide your finger down to uncover the vent hole.
Bb SOPRANO CLARINET

Tune The Instrument

1) Tune with the barrel joint. NEVER the mouthpiece.

2) Tune with the middle joint.

3) Tune with the Bell joint.

Intonation Discrepancies - Bad Notes - Natural Tendencies

Causes and Remedies for Bad Notes

Reeds - Hard reeds generally cause sharpness.
- Soft reeds generally cause flatness.
- Soft reeds generally emphasize natural tendencies

Embouchure - Check the angle held for the beat tone, (approx. 40 degrees)
- Too little mouthpiece in the mouth may emphasize overall flatness.
- Too much mouthpiece in the mouth may emphasize overall flatness.

Mouthpiece - Closer mouthpiece lays tend to be sharper than open mouthpiece lays.

Dynamics - Crescendos may blow flat.
- Diminuendos may blow sharp.
- Make all dynamic changes by blowing air faster and slower.
- To overcome flatness on crescendos:
  Drop lower jaw slightly.
  Maintain breath support while increasing the velocity of air stream.
  Increase lower lip pressure slightly.
- To overcome sharpness on diminuendos.
  Maintain breath support while decreasing the velocity of air stream.
  Relax the embouchure slightly in lower jaw and lower lip.

Alternate Fingerings - Use alternate fingerings whenever possible to correct notes with long duration that have bad pitch.
CLARINET
Possible Adjustments for Selected Pitch Tendencies

Sharp - Partially cover or "shade" the 3rd ring key of the right hand to lower the pitch.

Occasionally flat - Adjust fingering by opening the right hand bottom side key to raise the pitch.

Sharp - Experiment with a variety of added fingers in the right and left hands - occasionally all the additional fingers of both hands (including the low F key) may be added to lower and resonate those notes.

Frequently flat - Adjust fingering by opening the right hand Eb key to raise.

Frequently flat - To raise you can (1) use the chromatic (fork) fingering (2) use the 3rd finger of the right hand instead of the usual 2nd finger (3) use the 3rd finger plus the right hand Eb key.

Tends to be sharp - keep the embouchure firm and open the throat with flat tongue to humor a lower vowel sound.

Tends to be sharp - (1) Keep the throat open and free (2) Alter the fingering by adding the 3 fingers of the right hand to lower the pitch (this may appear to get stuffy) (3) Alter the fingering by adding the 3rd finger of the left hand to the regular fingering.

If sharp - Alter the fingering by not using the right hand Eb key.
CLARINET
Possible Adjustments for Selected Pitch Tendencies

If flat - use this fingering (a 4th line D, plus the low C# key, no right hand Eb key).

Occasionally flat - Best pitch and tone are achieved by (1) Thumb, register key, 1st and 2nd fingers of the left hand, 1st, 2nd and 3rd fingers of the right hand and Eb key in Right hand. (2) If still flat, finger like a flute high E natural.
Pitch Tendencies & Adjustments

\textbf{Clarinet}

(Notes not addressed are generally acceptable)

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline
Pitch & Tendency & F & F & F & F & F & S \\
\hline
Adjustment & No & 1, 2, 3, 4 & 4 & RT & Use 1 & 4 & none \\
Fingering & & & & & LT1 & S1 & Add 4, 5, 6 \\
Adjustment & & & & & & & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
S & VS & S & S & S & S & S \\
\hline
Use 3, 4, 5, 6 & Use A & S4 or & None & Use A & S4 & None & half hole 1 \\
and RP1 & 3, 4 and RP1 & or 1 & 4 & or 1 & 4 & Possible shading of left hand & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|}
\hline
S & S & VF & VF \\
\hline
half hole 1 & LT1, 1/2H 1, 2, 3 & LT1, 1 & 2, 3, LP4 & LT1, 1, 2, \\
& 5 and RP4 & 4, 5, 6 & 4, 5, 6, RP4 & LT1, 2, 4, 5, RP4 \\
& & & & or LT1, 1, 4, RP4 \\
\hline
\end{tabular}
CLARINET TUNING GUIDE

Procedures for Tuning the Instrument
1. Warm up thoroughly before tuning.
2. Tune at a mezzo-forte dynamic level and do not use vibrato.
3. Tune to a reliable frequency (electronic tuner, etc.) using the recommended tuning note(s) below.
4. Do not humor the tuning note; play it straight. Adjust the barrel (middle joint and bell) if the pitch is sharp or flat.

**BASIC TUNING NOTE(s)**

Tuning pitches are indicated with half notes; quarter note pitches are used to help “groove” each tuning note by approaching it from below or above.

```
\[ \text{mf} \]
\[
\begin{align*}
G & \text{ G} \\
& \text{ adjust} \\
& \text{ barrel} \\
& \text{ C or B} \\
& \text{ adjust} \\
& \text{ middle} \\
& \text{ joint} \\
& \text{ adjust} \\
& \text{ bell}
\end{align*}
\]
```

**Tuning Mechanism:** Barrel (Middle Joint, Bell). Pull out or push in the barrel (never the mouthpiece) to tune the open tone G if it is sharp or flat (the barrel is the main tuning mechanism). Next, adjust the middle joint to tune the G on top of the staff. Last, adjust the bell to tune the C or B in the staff if necessary.

**Note:** If your soprano clarinet is extremely sharp and you have to pull the barrel more than 1 1/2 mm, use tuning rings to fill in the gap, otherwise poor intonation will result.

The concert tuning pitches for B flat soprano, bass and contrabass clarinetst are F and B flat or A; the concert tuning pitches for E flat soprano, alto and contralto clarinets are B flat and E flat or D.

**Techniques for Adjusting Pitches While Playing**
1. Alternate Fingerings
2. Finger Shading
3. Embouchure Adjustment-Lipping
4. Combinations of the Above

**INHERENT INTONATION FLAWS**

```
\[ \text{a)} \]
\[
\begin{align*}
& \text{ or} \\
& \text{ or }
\end{align*}
\]
```

a) The throat tones may be sharp or flat depending on the instrument, mouthpiece, reed, and/or player. Use finger shading or alternate fingerings to correct faulty intonation.

b) For B natural, lower the second finger of the left hand over the second tone hole until the note is in tune. For C natural, lower the first finger of the left hand over the first tone hole.

c) These notes (and possibly others) may be out of tune on your instrument. If so, experiment with finger shading and alternate fingerings. Remember that the clarinet is the least flexible of all wind instruments as regards pitch adjustment by lipping.

**Good clarinet intonation and tone quality are largely dependent upon correct embouchure formation, sufficient air support, and a good quality mouthpiece and reed.**

*Arrows pointing up indicate that the notes tend to be sharp; arrows pointing down indicate that the notes tend to be flat.*
CLARINET INTONATION CHART

Name __________________________________________ Date ____________________________

Instrument Make and Model _____________________________________________________

Mouthpiece and Reed Used ______________________________________________________

Carefully follow the procedures outlined in the Tuning Guide for your instrument before beginning to chart your intonation with a friend. Your teacher should provide an Intonation Charting Guidesheet with instructions on how to use an electronic tuner. Mark intonation discrepancies for lower octave scales below the staff.

Tuning Notes

Clarinet

Chromatic Scale

Major Scales

Harmonic Minor Scales

Pitch Tendencies of Dynamics

mf pp ff —— pp ff —— pp ff ——