



# Intonation Skills Assessment

## Improving your Aural Acuity, Tone & Intonation

A musician must possess several skills in order to perform “in tune.” This assessment will serve as a good starting point to assess and further develop these musical skills: **Aural Acuity, Pitch Adjustment and Intonation.**

### Aural Acuity

Use the [Intonation Accuracy Listening Test](#) to answer the questions below:

**Options**

<input type="radio"/> First Note High	<input type="radio"/> Medium	<input type="radio"/> Low	<input checked="" type="radio"/> Changing
<input checked="" type="radio"/> Melodic		<input type="radio"/> Harmonic	
<input checked="" type="radio"/> First Note Waveform Sine	<input type="radio"/> Square	<input type="radio"/> Sawtooth	<input type="radio"/> Triangle
<input checked="" type="radio"/> Second Note Waveform Sine	<input type="radio"/> Square	<input type="radio"/> Sawtooth	<input type="radio"/> Triangle

Use the default settings to answer questions 1 and 2 (Changing, Melodic, First Waveform Sine & Second Waveform Sine).

Change the settings as directed below to answer questions 3-7.

Use the settings above (these are the default settings when first opened in a web browser). Play the game by selecting the correct answer to this question: Is the second pitch higher than the first? (select Y if it is higher, N if it is lower). Once you answer incorrectly 5 times, the game is over. Once finished, you will be given a score.

1. After the **1<sup>st</sup> time** you play the game, enter your score here: \_\_\_\_\_
2. **Using the same settings**, play the game again; enter your score for the **2<sup>nd</sup> time**: \_\_\_\_\_
3. Change the setting to **First Note High**; play the game; enter your score here: \_\_\_\_\_
4. Change the setting to **Medium**; play the game; enter your score here: \_\_\_\_\_
5. Change the setting to **Low**; play the game; enter your score here: \_\_\_\_\_
6. Change the setting to **Harmonic AND Changing**; play the game; enter your score here: \_\_\_\_\_
7. **Using the same settings**, play the game again; enter your score for the **2<sup>nd</sup> time**: \_\_\_\_\_

## Tuning Procedure

**Tuning Note:** Ask your director which “tuning” note you should use for this exercise. To be most compatible with the assessment and exercises below, the tuning note should be a concert pitch “A” or concert pitch “Bb.”

8. Indicate which note you are using for tuning. I am playing:

concert “A”  
 concert “Bb”

**Using an electronic tuner, adjust your instrument until the note is “in tune.” Note: Research has shown that the “tuning note” pitch is most centered and stable when approached from below, (Jurrens, p. 5), e.g. “F, G, A Bb” or “F, G, A,” where the notes are played in quick succession and the final pitch is sustained for evaluation.**

The pitch will often settle close to, but not exactly “in tune.”

9. Indicate which direction the pitch settled:  above;  below;  exact

10. Indicate the amount of deviation, if any, from “in tune:”  (in cents)

Once tuned, proceed to the next step. Have an observer or your director record the answers in the charts below.

## Pitch Adjustment

Using the **tuning note**, how far can you adjust the pitch **down** (without changing pitch)? Enter 0 if the adjustment is the wrong direction or no adjustment in pitch is evident.

X	Y	Z
Student is able to adjust pitch in the correct direction	Student is able to adjust pitch, but not in the correct direction	Student is not able to adjust pitch (or change is too small to measure)

11. **Tuning note** - amount adjusted **down**:  (in cents)

12. Which rubric category from above best describes the adjustment:

Using the **tuning note**, how far can you adjust the pitch **up** (without changing pitch)? Enter 0 if the adjustment is the wrong direction or no adjustment in pitch is evident.

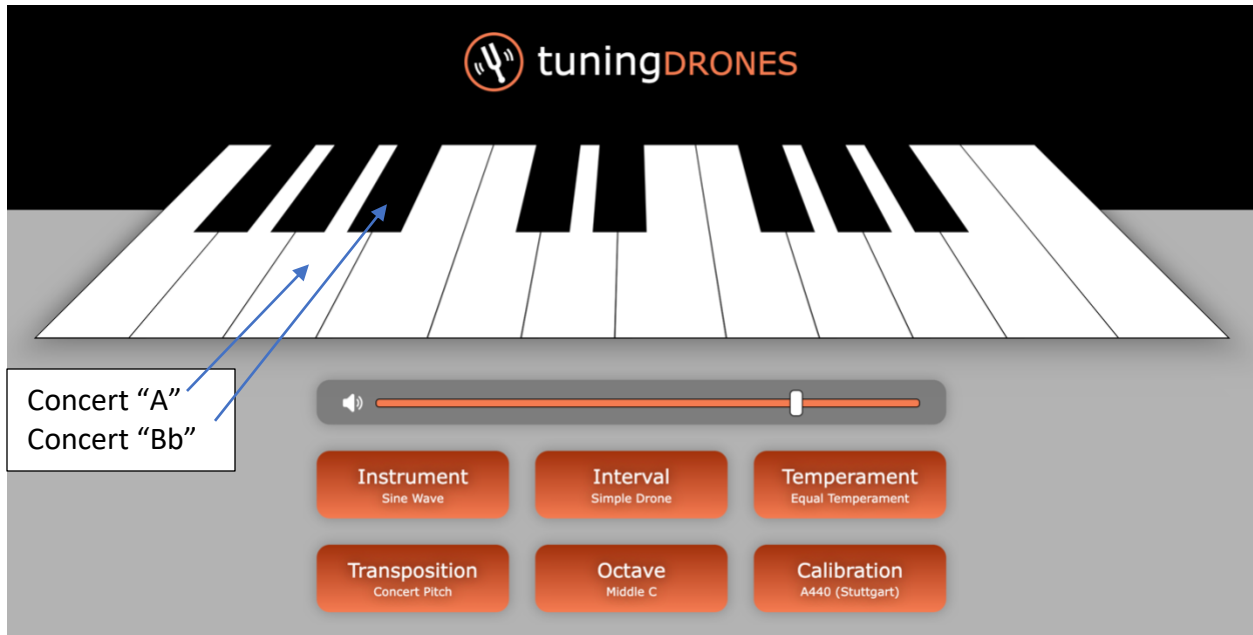
X	Y	Z
Student is able to adjust pitch in the correct direction	Student is able to adjust pitch, but not in the correct direction	Student is not able to adjust pitch (or change is too small to measure)

13. **Tuning note** - amount adjusted **up**:  (in cents)

14. Which rubric category from above best describes the adjustment:

## Intonation Practice With Drones

Use [Tuning Drones](#) to follow the process below:



Using the settings above, practice playing your tuning note with the drone. To start and stop the drone, use your cursor to click the concert “A” or concert “Bb.”

- Practice adjusting the pitch (above and below the drone); then, match the drone
- Practice using **different instruments** and adjusting the pitch to match
- Practice using **the perfect intervals** (4<sup>th</sup> & 5<sup>th</sup>) and adjusting the pitch to match – this will require you to play a different note(s). See if you can figure out what pitches to play by using your ear to find the correct note(s)
- Change the **temperament** to **just intonation**, select **the perfect intervals** (4<sup>th</sup> & 5<sup>th</sup>) and adjust to match pitch
- Use **just intonation** and intervals of **major third** or **minor third** to practice matching pitch
- Play the drone using headphones and use a tuner to check the tuning of the pitch you are playing. **Be sure that your tuner is set to the correct temperament – either equal temperament or just intonation.**

Questions for reflection and discussion:



- How is **just intonation** different from **equal temperament**?
- Using **just intonation**, what change did you make to tune the **perfect fourth**?
- Using **just intonation**, what change did you make to tune the **perfect fifth**?
- Using **just intonation**, what change did you make to tune the **major third**?
- Using **just intonation**, what change did you make to tune the **major third**?