

Untitled 6

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This piece is for three or more violins, violas, and/or cellos. Any other similar bowed instruments capable of being tuned in any of the four tuning configurations specified may also be used.

The strings are divided into two groups: the “primary” and “secondary” groups. The secondary group always plays with a mute, preferably a mute that significantly alters the timbre while not overly muffling the dynamic range. The primary group always plays without a mute. If there is an even number of performers, the two groups are equal in number. If there is an odd number of performers, the primary group has one more performer than the secondary group.

Primary Group:

The primary group simultaneously follows two charts.

On **Chart A**, one navigates a field of four different types of playing:

- **Initiating melody** – denoted by an ordering of the numbers **1, 2, 3, and 4**. A “melody” here is playing all four open strings in a particular order. The numbers correspond to the four open strings and the order in which to play them (left to right).
- **Imitating melody** – denoted by an **“I”**. Hear a “melody” played by another player in either group and play that same ordering of open strings on your instrument. Try to imitate not only the order of the strings but also the dynamic and whether or not they are playing at the second partial harmonic.
- **Tone** – denoted by a **“T”**. Play any open string at your discretion. The choice should not be made randomly but with other currently sounding strings in mind.
- **Silence** – denoted by a **blank square**. The duration of the silence may be a bit flexible at your discretion in order to regroup, rest a bit, plan ahead, etc.

Being “at” a square consists of three “moves”:

1. Playing that square.
2. Playing any square to the left, right, up, or down of it (i.e. any square around it not diagonal).
3. Play the “home” square again.

You might want to imagine a cross-shape of squares like so:

	4132	O	2413	
112	O	3124		314
O	1324	T	3142	
43		3142	O	324
T	1423	O	2413	

After these three moves, move to another adjacent square and have that act as your “home” square for the next three “moves”.

At the beginning of the piece, start on any of the middle four squares. Travel in a direction leading to any of the four corners of the field without going “backwards” (towards the middle). Once you reach one of the corners, reverse until you reach one of the four middle squares, then reverse again, etc., until the conclusion of the piece.

The squares with a bolded border around them are to be played at the second partial harmonic. All others are regular open strings.

Chart B: Primary contains a series of time unit lengths and available bow lengths.

A **time unit** consists of a number of beats at around 70 BPM.

Each unit, when in effect, corresponds to all four types of playing in chart A.

- **Initiating & imitating melody** – Play the four open strings, in a roughly equal division, over the length of the unit (i.e. the number in the chart refers to the *total* length of the entire four-note melody).
- **Tone** – hold the tone for the length of the unit.
- **Silence** – do not play for the length of the unit. You may choose to be silent for somewhat longer or shorter than the time unit at your discretion, perhaps in order to “regroup” for the next tone or melody.

Each column represents a different six minute period of time, totaling the piece’s length of an hour.

Try not to purposefully coordinate with the other players; in other words, do not try to start a time unit “on the beat” of another player, etc. Just do your own thing rhythmically and accept where your beats might happen to fall. These beats need not be precise or consistent – since they’re entirely personal and internal, they serve only

as methods to suggest lengths of the different melodies/tones/silences. Feel free to speed up or slow down slightly if you feel the need. However, try to guard against slowing down too much, particularly in the beginning.

A single timer/clock in everyone's line of sight will likely be the best method to signal to everyone when you are in the next six-minute unit. Please do not use a clock or timer that shows seconds, only minutes, so that there is not a visual metronome anywhere to interfere with your internal pulse. (In the first performance, a person not in the ensemble plugged in a digital alarm clock to start the time at "12:00" with the piece going until "1:00".)

The chart also shows three available **dynamics** – forte, mezzo-forte, piano, and triple piano - over the course of a given section. The dynamics are chosen freely, with the size of the text denoting the relative frequency of choosing the dynamics. The larger the text, the more often you should choose that dynamics, the smaller the text the less often.

While you should definitely take into account the general volume of the ensemble when choosing a pitch, above all don't overthink it and don't be afraid to use the less frequent dynamics. If you choose a softer volume while the ensemble is on the loud side, they may stop their notes to reveal yours; or your loud note might serve to reinforce the other quieter notes rather than drowning them out.

The dynamics should be as constant as possible for the entire length of the tone or melody – i.e. no crescendo or diminuendo.

Secondary Group

As mentioned above, the secondary group always plays with a mute, preferably a mute that significantly alters the timbre while not overly muffling the dynamic range.

The secondary group has only three modes of playing:

- **Imitating melody** – Hear a "melody" played by another player in either group and play that same ordering of open strings, attempting also to imitate the dynamic and whether or not it was played at the second partial harmonic.
- **Tone** – Play any open string at your discretion.
- **Silence**

Choose an order for these three modes of playing – e.g. tone, then, imitation, then silence – and write them down twice. Then choose one of the instances of tone (either the first or second) and make some sort of indication (such as circling it) that that tone

will be played at the second partial harmonic. This subsequent series will be the order to repeat throughout the entire piece. For example:

T I S **(T)** I S

This ordering will serve as your **Chart A**.

Use **Chart B: Secondary** in a similar manner as the primary group uses theirs. As with group A, use the available time unit at around 70 BPM for the section the piece is currently in. Choose from the available dynamics for your tone, as explained above.

Scordatura

The violin, viola, and cello each have 3 available scordaturas, labeled A, B, and C.

I suggest distributing the scordaturas to the available instruments in an even manner – making sure that at least one instrument has scordatura A, B, and C, not doubling an instrument type with the same scordatura until necessary and, if possible, trying to distribute the scordaturas somewhat evenly between the secondary and primary groups.

For example, if you are working with a string quartet format, you might assign A to the first violin, B to the second violin, C to the viola, and A to the cello. If you added a second viola, they might get B or C. The first performance of this piece used an ensemble of one violin, two violas, and two cellos and the tuning assignment was: violin, B; first viola, C; second viola, A; first cello, A; second cello, B.

The charts on the following page show each instrument's scordaturas, with frequency in Hertz and relationship to A440 equal-temperament in cents.

Violin

Scordatura	String	Hz	ET relationship
A	I	617.15	D#6, -14
	II	420	G#5, +19
	III	280	C#5, +18
	IV	175	F4, +4
B	I	580.75	D6, -20
	II	420	G#5, +19
	III	280	C#5, +18
	IV	180	F#4, -47
C	I	600	D6, +37
	II	440	A5
	III	286.36	D5, -44
	IV	186.66	F#4, +16

Viola

Scordatura	String	Hz	ET relationship
A	I	420	G#5, +19
	II	280	C#5, +18
	III	175	F4, +4
	IV	116.67	Bb3, +2
B	I	427.78	A5, -49
	II	280	C#5, +18
	III	180	F#4, -47
	IV	120	B3, -49
C	I	440	A5
	II	272.22	C#5, -31
	III	175	F4, +4
	IV	114.55	Bb3, -30

Cello

Scordatura	String	Hz	ET relationship
A	I	210	G#4, +19
	II	140	C#4, +18
	III	87.5	F3, +4
	IV	58.36	Bb2, +2
B	I	213.9	A4, -49
	II	140	C#4, +18
	III	90	F#3, -47
	IV	60	B2, -49
C	I	220	A4
	II	136.11	C#4, -31
	III	87.5	F3, +4
	IV	57.25	Bb2, -30

Chart A

1432		1432		T		4123	I	1432	T		T	I		4123	
T	1432	T	2341		1432	T	2341	I	1432	T	I	T	4123	I	4123
1432	I	2341	I	1243	T	3421	I	2143		2134		1432	I	4123	T
	2341		4312	T	2143	T	2143	I	2134	T	1243		1432		I
T		1243	I	1423	I	3241	I	1342		2413	I	4312	T	I	
	1432		3412		4213	T	2431	T	2413	I	4132		1243		T
4123		4312		4132	I	2413		2314	I	3142	T	2143		1432	
I	2341	I	3412	I	3124		3142	T	2413		1342	I	4312	I	1432
1432	I	1243	I	1324	T	3142		2413	T	2431	I	3412	I	2341	I
T	1432	T	2143		3142	I	3241	T	3142	I	1423		1243		4123
	T	4312	T	1423	I	2413		3142		4231	T	3412		1423	
T	I		1243	I	4231	T	1324	I	2314	I	4132	I	4312		T
I	T	1432		4312		3421	I	3412	T	2143		1243	T	2341	
	4123	I	1432	T	2134	T	3412	I	3421	T	4312	I	2341	I	1432
4123	I	4123		I		1432	I	2341	T	1432	T	2341		1432	T
	4123	T	I		T		1432	I	2143	T		T	1432		1432

Chart B: Primary Group

<i>0'</i>	<i>6'</i>	<i>12'</i>	<i>18'</i>	<i>24'</i>	<i>30'</i>	<i>36'</i>	<i>42'</i>	<i>48'</i>	<i>54'</i>
4	5	6	7	8	10	12	14	16	19
f, p, ppp			f, p, ppp			p, f, ppp		p, ppp, f	

Chart B: Secondary Group

<i>0'</i>	<i>6'</i>	<i>12'</i>	<i>18'</i>	<i>24'</i>	<i>30'</i>	<i>36'</i>	<i>42'</i>	<i>48'</i>	<i>54'</i>
5	6	8	10	12	14	16	18	21	24
f, p, ppp			f, p, ppp			p, f, ppp		p, ppp, f	