

Orchestral Stringed Instrument Sizing for Students

Sizing for Violin

Violins come in eight sizes: 4/4 (full size), 3/4 size, 1/2 size, 1/4 size, 1/8 size, 1/10 size, and 1/16 size (1/32 size violins are available, but much less common).

Almost all adults use a full size violin (4/4 size). There is another less common size, the 7/8 size violin, used by violinists who want a full size violin sound, but whose hands are either too small for a full size violin, or whose hands have a reduced capacity for reach and grip. The 7/8 size violin is midway between a 3/4 size violin and a full size violin, accommodating the needs of these violinists.

Arm Length	Violin Size
24" 610mm	4/4 size violin
22.5" 572mm	3/4 size violin
21" 533mm	1/2 size violin
19" 483mm	1/4 size violin
18" 457mm	1/8 size violin
16.5" 419mm	1/10 size violin
15" 380mm	1/16 size violin

Violin Size Chart: Using Arm Measurements for Violin Sizes

There are 2 options to establish which size of violin is most suitable.

1/ it is necessary to establish the distance between the neck and middle of the left-hand palm (with hand fully extended and raised perpendicular to the body, just like holding a violin).

2/ some teachers prefer to use the distance from the neck to the wrist instead.

The violin size determined by the neck to wrist method would be the more comfortable for students to hold, whereas the violin size determined by the neck to mid-palm measurement would indicate the biggest size students should use.

If you have a teacher, you should ask for your teacher's recommendation. If you don't have a teacher, we would recommend using the neck/wrist approach for students not using full size. For students who are deciding whether to use 3/4 or 4/4 size, use the neck/mid-palm approach. This is because it is always better that a student feels comfortable holding and playing the violin.

The violin sizing chart to the left lists the arm length for each violin size. Find your length using your preferred approach and use that to determine the size of violin to get.

Sizing for viola

Viola sizes refer to the actual length of the instrument's body, in inches. The largest common size is 16.5". Adults generally play a 15.5" to 16.5" viola.

Violas, being larger than violins, are measured to be a little bit over-sized for the player. That said, it is important that

the student is comfortable holding and playing the instrument or physical problems may develop.

Please note that there are different methods of sizing a viola, so if your teacher has a recommendation, you should follow your teacher's advice.

Viola measurement chart

Arm Length		Viola Size
27"+	685mm	16.5" viola
26.5-27"	675-690mm	16" viola
25.5-26.5"	650-675mm	15.5" viola
25-25.5"	635-650mm	15" viola
23.25-25.5"	590-635mm	14" viola (intermediate)
22-23.5"	560-590mm	12-13" viola (junior)

How to measure

Stand with left arm fully extended, perpendicular to body. Measure from the neck, to the base of the fingers.

Note that this results in a higher measurement than the recommended method for sizing the violin (neck to mid-palm).

Sizing for Cello

There are different methods of establishing the correct size of Cello. These methods are a guide and should ideally be used in conjunction with a cello teacher's experience and recommendations

- b) The lower bout corner should be touching the left knee
- c) The neck of the cello should be a few inches away from the left shoulder
- d) The C string (thickest string) peg should be near the left ear

1/ How to measure (With a cello)

If you have access to cellos of different sizes, it is recommended that you follow this process to determine which cello is right for you.

1. Sit with the knees bent at 90 degree angle.
2. Hold the cello and check for the following:
 - a) The upper rim of the cello should rest on the sternum (breast bone)

2/ How to measure (Without a cello)

You can achieve a very close approximation using three measurements.

1. The height of the player
2. The distance from the shoulder socket to the tip of the middle finger (left arm)
3. The distance between the tip of the index finger and the tip of the pinky (left hand)

These measurements will provide a general guide. You may end up in two different ranges, depending on the method

Cello measurement charts

Height of Player		Arm Length (shoulder socket to tip of middle finger)		Finger Span (index to pinky)		Cello Size
5' plus	1525mm	24"+	610mm	6"+	150mm	4/4
4'6"-5'	1370-1525mm	22-24"	560-610mm	5-6"	130-150mm	3/4
4' – 4'6"	1220-1370mm	20-22"	510-560mm	4-5"	100-130mm	1/2
Up to 4'	1220mm	18-20"	460-510mm	3-4"	75-100mm	1/4

Sizing for Double Bass

If you want to play the double bass, the first factor you must consider is how tall you are. Yes, your height matters when it comes to the double bass. The taller you are or the bigger your frame, the more easily you can handle playing the double bass.

Generally, the size of the double bass that is commonly used is 3/4.

Here are the different sizes of the double bass based on its body height (measurement from bottom to shoulder). Note that these are only approximate measurements.

1/4 size - It measures 37.4 inches and is the smallest of the double bass. This is the size that's recommended for children.

1/2 size - It measures 40.2 inches and will be suitable for older children to adults who are around five feet four inches in height.

3/4 size - It measures 43.7 inches and is the size most commonly used by musicians.

4/4 size - It measures 45.7 inches and is the largest size of the double bass. Few players are capable of playing this size but some claim that it sounds better than the smaller double bass.