

⊙ MUSICAL INSTRUMENTS: Let's talk. Can you **name** any musical instruments in English? Which words are **similar** in English and in your mother tongue (= first language)? Can you **play** any of them? Write down the most interesting answers you've been listening to, if you wish.

* Depending on the mother tongue, the degree of similarity can vary, but supposing that Catalan / Spanish are the main ones for a reference: violin, viola, cello, flute, piccolo, clarinet, oboe, guitar, saxo(phone), trumpet, tuba, xylophone, triangle, maracas, balalaika, zither...

⊙ INTERACTIVE E-INSTRUMENTS: Play, listen and learn about them at:

- Primary resources. "Choose an activity: xylophone notes, keyboards bits, parts of a drum kit, sorting instruments"
<http://www.primaryresources.co.uk/online/music.swf>
- Primary resources. "E-board: interactive piano"
<http://www.primaryresources.co.uk/music/piano.html> Play notes (naturals, flats and sharps), chords, scales.
- BBC. "Play some strange instruments: seasons, drones, squares, gamelan, lizard" <http://www.bbc.co.uk/radio3/makingtracks/games.shtml>
- Tulga, Phil. "Water Bottle Xylophones." <http://www.philtulga.com/water.html#8-note>. Includes playing tips.

⊙ INSTRUMENTS OF THE ORCHESTRA: Learn about the musical instruments in the different families that form a symphony orchestra and their seating layout. Take advantage of the following web sites to listen to, watch and read about their features (=characteristics):

- New York Philharmonic. "Instrument Storage Room".
<http://www.nyphilkids.org/lockerroom/main.phtml?>
- Dallas Symphony Orchestra. "Families of the Orchestra"
<http://www.dsokids.com/2001/instrumentchart.htm>
- San Francisco Symphony. "Instruments of the Orchestra"
<http://www.sfskids.org/templates/instorchframe.asp?pageid=3>
- National Arts Centre / Centre National des Arts. *The NAC Orchestra*: "The Instrument Lab" <http://www.artsalive.ca/en/mus/instrumentlab/>
- BBC. "Guide to the Orchestra!" <http://www.bbc.co.uk/orchestras/guide/>

... / ...

... / ...

* Many different possible answers. Notice some peculiarities:

After that, try to write down some instruments ...

- ... mainly made of wood:

Double bass, **xylophone**, oboe, etc.

- ... mainly made of metal:

Piccolo, flute, **saxophone**, , glockenspiel, etc.

- ... which have got a part or more made of leather:

Some drums, some stringed instruments,

- ... which have to be struck:

Piano, castanets, gong, timpani, etc.

- ... which have to be blown:

Bag pipe, brass instruments, woodwind instruments, harmonica, etc.

- ... which have got strings and have to be plucked:

Harpsichord, harp, guitar, etc.

- ... which belong to the string section of the orchestra:

Piano, harp, first and second violins, viola, cello, double bass, etc.

- ... which belong to the woodwinds:

Piccolo, flute, **saxophone**, clarinet, oboe, bassoon, etc.

- ... which belong to the brass section:

Tuba, trombone, French horn, trumpet, etc.

- ... which belong to the percussion section:

Piano, snare drum, kettle drums (= timpani), triangle, Chinese block, tambourine, etc.

⊙ INSTRUMENT PUZZLES: Test yourselves as you are having fun.

- Find a class mate and take an orchestra instrument card set to find the matching pairs. When you are happy with them, check how well you did it at: http://www.primaryresources.co.uk/music/docs/orchestra_instruments.doc
- Try the multiple choice listening game "Name the Instrument" at: National Arts Centre / Centre National des Arts. *The NAC Orchestra*: <http://www.artsalive.ca/en/mus/activitiesgames/>
- Print a "Mysterious Music Machine" sheet (worksheet 11) at <http://www.primaryresources.co.uk/music/pdfs/Music%20Games.pdf> and try to

work out the names of the instruments from the music code machine. Write them again into its corresponding family box below.



⊙ ORCHESTRAL FAMILIES: Draw an **orchestra seating chart**. Lay out the different **families** where corresponding and don't forget to label them. You can **inspire yourself** by revisiting the web sites suggested in the preceding activity, if you like.

= Personal / collaborative picture / display.

⊙ ORCHESTRAL FAMILY SAMPLES: Switch on a virtual radio station. Read about each piece as you listen to: San Francisco Symphony. "Radio: Channel 1: All in the Family." <http://www.sfskids.org/templates/radio.asp?pageid=21>.

What's the name of the piece you've enjoyed the most? Who composed it?

* Personal answer

⦿ BRITTEN'S GUIDE TO THE ORCHESTRA: Listen to how the different families or sections and single instruments sound **separately** and **together** while performing the composition *The Young Person's Guide to the Orchestra* by Benjamin BRITTEN. The main theme was composed by the Baroque, also English composer Henry PURCELL. What BRITTEN wrote are all **variations** on that theme. Observe that, at the end, all the variations will come in one after another in a musical form called **fugue**.

Can you fill in the gaps? This is the **structure** of the work. Use:

orchestra	orchestra	families	instrument	instruments	instruments
string	string	woodwind	woodwind	brass	
brass					
brass	percussion	percussion	theme	fugue	

A. The whole orchestra play PURCELL's theme together.

B. The four different families in the orchestra play variations on that theme.

B.1. The woodwind family

B.2. The brass family

B.3. The string family

B.4. The percussion family

A. The whole orchestra play PURCELL's theme together again.

C. Each instrument in turn plays a variation on PURCELL's theme.

C.1. The woodwind ladder begins, from top to bottom. It has four steps.

C.2. The string ladder continues. It has five steps.

C.3. The brass ladder come next. It has four steps, too.

C.4. The most familiar percussion instruments close this section.

Seven single or pairs of instruments play one after another and all together.

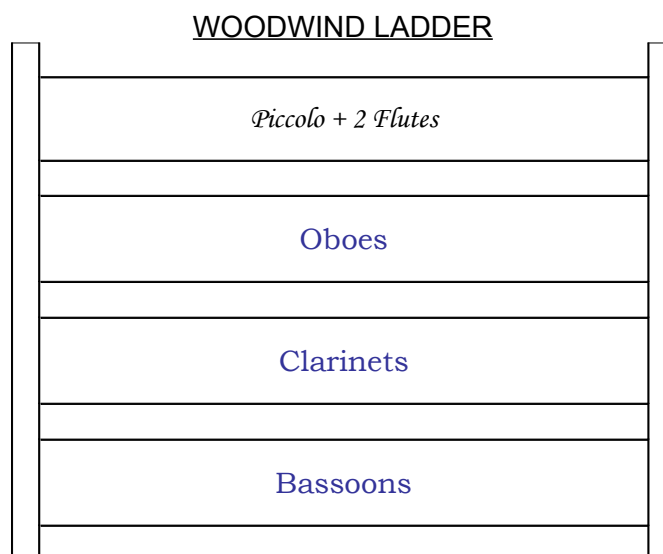
D. In the same order as before, all the instruments play their theme, one after another.

At the end, when all of them have finally come in, the [brass](#) family plays all PURCELL's [theme](#) while the rest of the [instruments](#) go on playing BRITTEN's [fugue](#).

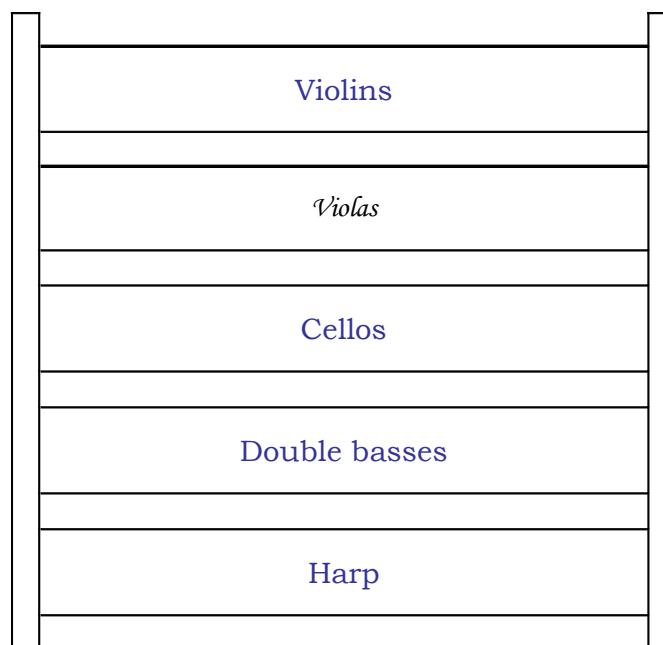
Listen again. These are all the instruments you can hear play in the version narrated by Leonard BERNSTEIN in alphabetical order.

All the percussion	Bass drums	Bass tuba	Bassoons	Castanets	Cellos
Chinese block	Gimbals	Clarinets	Double basses	Flutes	
Gong					
Harp	Horns	Kettle drums (= Timpani)	Oboes	Piccolo	Snare drum
Tambourine	Triangle	Trombones	Trumpets	Violas	Violins
	Whip		Xylophone		

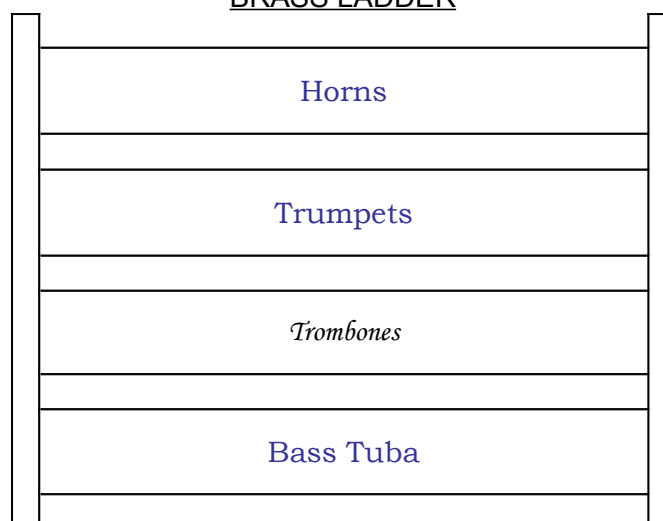
Try to complete the "ladders" from the highest instrument in pitch to the lowest one in each family in order of appearance.



STRING LADDER



BRASS LADDER



Do the same with the percussion instruments in order of appearance alone or in pairs, in this case:

PERCUSSION LADDER



⊙ OTHER MUSICAL ENSEMBLES: Apart from symphony orchestras there's an uncountable number of musical ensembles of all sorts.

For instance, what do you call the **musical ensemble** ...

- ... that performs **pop music**?

Pop band.

-
- ...formed by a group of **singers**?

Choir.

-
- ... formed by a combination of **seven** musicians?

Septet.

-
- ... where the same musician plays a small pipe and a tiny drum, the double bass has only got three strings and they all play **a traditional Catalan circle dance**?

Cobla'.

Septet?	'Cobla'?	Band?	Choir?
---------	----------	-------	--------

⊙ A REAL BAND AT THE STUDIO: Meet The Commonwealth at: <http://www.bbc.co.uk/musiclive/commonwealth/>. Let Security guide you into their music studio. If you follow the instructions, you can listen to (or watch) their introductions ("Meet the band"). Listen to their song, as well, and learn how they put all the elements in the song together ("Music section") by clicking on the instruments button. When you are ready, you'll be able to hear a variation of the song in a salsa style if you click on the trumpet.

Finally, have a go according to your skill level ("Mixer –easy–", "Melody –medium–", "Harmony –hard–.")

⊙ BUILD A BAND: Enter "Build a Band" at: <http://www.bbc.co.uk/cbbc/music/fun/> and try different combinations of sounds. From the three musicians rehearsing in a bedroom, end up by performing live for a large audience.

⊙ BECOME A LUTHIER: Luthiers' job is to make or fix stringed musical instruments.

First, you need to choose and investigate an instrument from the following list and take note of your observations:

- Dallas Symphony Orchestra. "Home activities"
[http://www.dsokids.com/2001/hactivities.asp?Action=Search&Title=&Inst="2"&Type="3](http://www.dsokids.com/2001/hactivities.asp?Action=Search&Title=&Inst=)
[Build Your Own Xylophone](#)
[Buzzing Brass Mouthpiece](#)
[Make A Woodwind Instrument](#)
[Make A String Instrument](#)
[Tin Can Telephone](#)
[Shakin' Maracas](#)
[Brass Instruments Uncoiled](#)
[Clay Pot Chimes](#)
[Shakin' Maracas](#)
[Coffee Can Drums](#)
- TULGA, Phil. "Inventing Homemade Instruments with Math and Measurement" <http://www.philtulga.com/HomemadeMusic.html>
[Water Bottle Xylophone](#)
[Pan Pipes](#)
[Tubular Glockenspiel](#)
[Fraction Tubes](#)
[Harmonic Series on a Vibrating String](#)

Name of the instrument: -----

How is the instrument put together?

-

-

-

What materials is it made of?

-

-

-

Is it tuned or untuned? -----

Is it solid or hollow (= having a hole or empty space inside)? -----

What parts does it have?

-

Which parts need to be strong?

-

Which parts make the noise?

-

How do you make the different notes?

-

-

-

... / ...
... / ...

Secondly, you have to take note of what you need to make the instrument of your choice.

I'll need:

-

-

-

-

-

Lastly, you have to make it. Enjoy yourself.

* Personal choice and answers, according to choice.