

Topic 1: the orchestra

Philharmonia Orchestra © Luca Migliore



Topic 1: What is an orchestra?

By the end of this lesson, students should be able to answer the following three questions in their workbook:

1. What is an orchestra?
2. What are the four different orchestral families?
3. What does a conductor do?

Pupil resources: Topic 1 in pupil workbook

SMSC Links	BV Links	LNIT Links
<ul style="list-style-type: none">• Social – the cohesion of ensemble music making and collective feedback• Cultural – learning about the symphony orchestra and Western Classical Music conventions	<ul style="list-style-type: none">• Democracy – how principal and section leaders are elected• Individual liberty – through free choice of conducting activities• Tolerance and Mutual Respect – class feedback to questions	<ul style="list-style-type: none">• Literacy – writing down responses to learning objectives• Numeracy – counting and conducting in 2, 3 and 4 time

1. What is an orchestra?

1. Meaning of 'symphony orchestra'
 2. Leader of the orchestra
 3. Section principal
 4. Conductor
- *An orchestra is a large instrumental ensemble made up of 4 different instrumental families*



Teacher Resources

Symphony literally means 'sounding together' and an **orchestra** is an instrumental ensemble, often made up of four different instrumental families – woodwind, brass, percussion and strings. There can be over 90 different people in a symphony orchestra.

The musicians play together and respond as one to the conductor, who might at any time change **tempo** (speed) or **dynamics** (volume) and will never do exactly the same thing twice. A conductor has to communicate their wishes not by talking, but by making gestures (movements) with their hands which the players interpret. The orchestra players do not just follow the conductor either; they also watch the **leader** (who is the violinist sitting closest to the conductor) as well as their own **section principal**. Playing in an orchestra is far more than just playing your instrument.

An orchestral player has to:

- **Follow their music** so they don't get lost
- **Watch** the conductor, leader and section principal

- **Count** continuously
- **Listen** to make sure they're playing exactly with everyone else and are in the right place
- **Play** the correct notes (which can be very difficult!)

Percussionists can have an even harder job as they have to play the multiple instruments at different times and might have to move all the way across the stage to get to the correct one. In the concert for *Orchestra Unwrapped*, we hope you'll be able to see this: players concentrating really hard and listening very carefully so that the sounds they make blend perfectly, playing at exactly the same time and exactly the right volume.

You'll also notice the **conductor** looking at the players to give them a certain cue or indicating through their body language how he/she wants them to play, so that their ideas about the character of the music are communicated to the audience as one.

2. What are the four different instrumental families?

- There are four families in the orchestra, each with different characteristics
- These videos, featuring the musicians of the Philharmonia orchestra, offer a great introduction to how the various instrumental families work. They are a little long to all study in one lesson, but fragments can be used to hear the contrasting sounds and timbres.

Find the videos here ►



Percussion instruments © Shutterstock

Percussion

- Instruments you hit to make them vibrate (example – vibraphone)



Violin © Shutterstock

Strings

- Instruments with vibrating strings (example – violin)



Clarinet © Shutterstock

Woodwind

- Sound made by blowing air through a tube often made of wood. Sometimes they have a reed (example – bassoon)



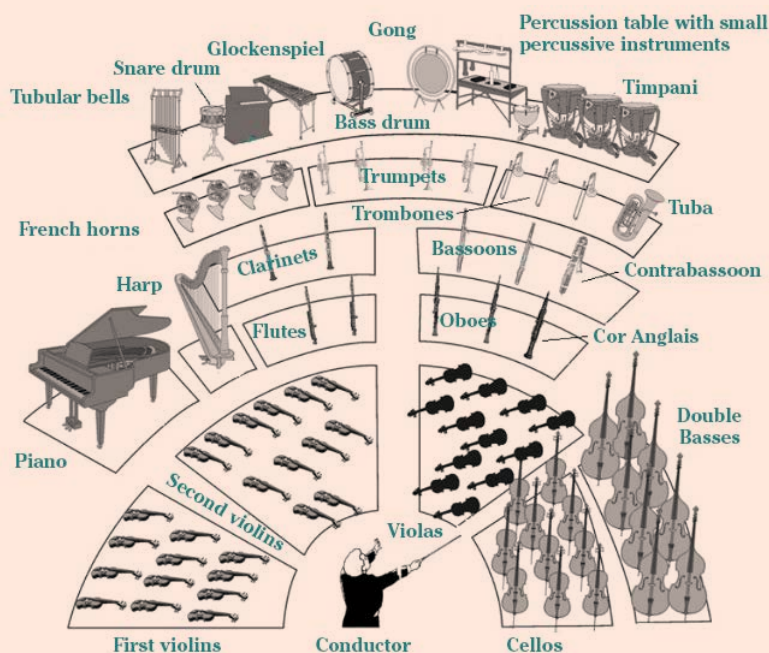
Trumpet © Shutterstock

Brass

- Sound made by blowing air through a tube made of brass (example – trumpet)



Teacher Resources - How the orchestra is constructed



WOODWIND	BRASS	PERCUSSION	STRINGS
Flutes (including piccolo) Clarinets Bass Clarinet Oboes Cor Anglais Bassoons Contrabassoon	French Horns Trumpets Trombones Tuba	TUNED: Timpani Bells Glockenspiel Xylophone Harps UNTUNED: Triangle Tambourine Cymbals Bass Drum Gong	Violin I Violin II Viola Cello Double Bass

- Woodwind and brass instruments are melodic instruments and can play one note at a time
- Some percussion instruments can play more than one note simultaneously, as can strings playing two or more strings at the same time (double stopping/triple stopping)
- Depending on when the piece of music was written directly links to how big the orchestra is; the more modern the piece of music, often the larger the orchestra required

What does a conductor do?

- This video is by the conductor of the Philharmonia orchestra
Find the video here ►
- The video goes over how to conduct in 2, 3 and 4 beats in a bar, discussing what a downbeat (beat 1) and upbeat (last beat)



Class activities to promote learning:

Class Activity C1:1. What does a conductor do?

This game helps to uncover what a conductor does

- Whole class standing in a circle
- Taking turns, one member acts as the conductor
- They show a 'hi-ya' karate chop which everyone must do simultaneously (i.e., not copying the conductor, but simultaneously with him/her)
- Everyone says 'hi-ya' as they do the action
- Repeat with a new conductor

As the game is being played, the group consider:

- When is it easy to follow the conductor?
- When is it more challenging to follow the conductor?
- What can the conductor do to make the class respond in the way they wish?

The conductor can consider:

- How could they get the class to change the character of the 'hi-ya'?

- How could they generate a gentle response? How about an aggressive one?
- How could they alter the speed (tempo)?
- How can they communicate a change in volume (dynamics)?
- How can they catch the group out to see who isn't watching?

You can extend this activity by moving into Class Activity C1.2:

Class Activity C1:2 Creating and conducting a class orchestra

This engages pupils in understanding how the orchestra is constructed

If your pupils have access to a range of instruments – strings, woodwind, brass and percussion – these can be used. If not, consider using class percussion (shakers, drums, scrapers and so on).

If no instruments are available, divide the class into 4 families of instruments – strings, woodwind, brass and percussion, using body percussion and voices.

- Sit around the conductor with quietest instruments (strings) at the front and the loudest (percussion) at the back

- Set the conductor of the orchestra some challenges, which might include:
 - Playing quietly (*piano*)
 - Playing loudly (*forte*)
 - Gradually getting louder (*crescendo*)
 - Gradually getting quieter (*diminuendo*)
 - Speeding up (*accelerando*) and slowing down (*rallentando*)
 - Making just one family play whilst the others are silent
 - Stopping just one family without stopping the others

Differentiation: support and challenge

These activities are excellent for all learners, but could possibly be differentiated in the following ways:

Increased support	Increased challenge
<ul style="list-style-type: none"> • Use voices and/or instrument playing the same repeated bar of music – for example C C G G or another well-known musical fragment • Model conducting as a teacher with pupils copying, moving towards being independent in activity 1.2 • Limit the range of dynamics to loud or soft, only introducing other concepts if this is beneficial 	<ul style="list-style-type: none"> • Introduce conducting actual repertoire, perhaps using choral and/or orchestral repertoire if available to extend activity 1.2 • Conduct own composition work