

1 Link each **block** of an audio system to its **function**.

block	function
preamplifier	high power output device
tone control	variable gain from one to zero
loudspeaker	high input impedance amplifier
signal source	produces a low power a.c. signal
volume control	boosts or cuts ranges of frequencies
power amplifier	increases amplitude of an audio signal
voltage amplifier	increases the current provided by an audio signal

2 Complete the block diagram for an audio system. Use the blocks listed above.



3 Complete the sentences for an audio system. Choose from these words.

**input    noise    output    signal**

Each block in the system adds some \_\_\_\_\_ .

The \_\_\_\_\_ impedance of each block must be much smaller than the \_\_\_\_\_ impedance of the next block in the system.

This ensures that most of the \_\_\_\_\_ is transferred from one block to the next.

4 Here are some statements about audio systems. Which of them are correct?

They ignore d.c. signals.

They must process a.c. signals from 2 Hz to 2 kHz.

Power amplifiers only increase the voltage of an a.c. signal.

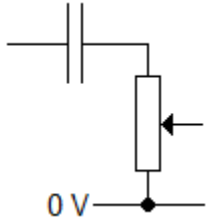
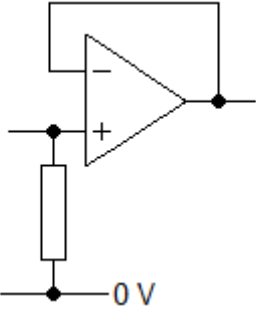
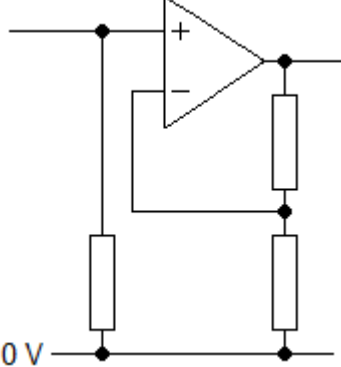
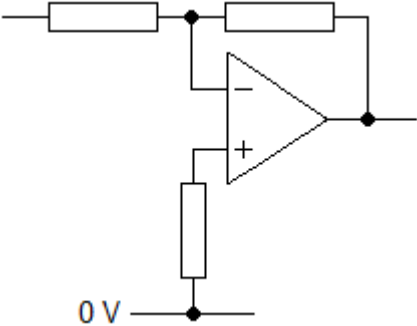
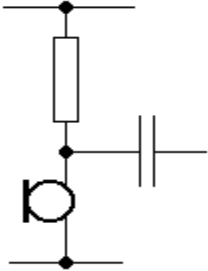
The overall gain is the product of the gains of the individual blocks.

Tone controls compensate for any non-ideal transfer characteristics.

Music played at low volume usually needs bass boost to sound right.

Amplifiers with negative gain are less likely to become unstable and oscillate.

5 Link each **sub-system** with its **function** in an audio system.

sub-system	function
	preamplifier
	signal source
	volume control
	power amplifier
	voltage amplifier