## Darlinghurst Academy Year 4 Autumn 2: Audio Visual – How do I see? How do I hear?

	Vocabulary	The ear
bright	a colour that is strong and noticeable, and not dark	Outer ear Ear drum Middle-Stirrup Eustachian tube to the throat
dark	the absence of light	
dim	light that is not bright	
emit	to emit a sound or light means to produce it	
light	a brightness that lets you see things.	
opaque	if an object or substance is opaque, you cannot see through it	
reflects	sent back from the surface and not pass through it	
shadow	a dark shape on a surface that is made when something stands between a light and the surface	The eye
translucent	if a material is translucent, some light can pass through it	
transparent	If an object or substance is transparent, you can see through it	
amplitude	a measure of the strength of a sound wave	
decibel	a measure of how loud a sound is	
frequency	a measure of how many times per second the sound wave cycles	
pitch	how high or low a sound is	
vibrations	invisible waves that move quickly	
volume	how loud or quiet a sound is	

## How is sound made?

- When objects vibrate, a sound is made.
- The vibration makes the air around the object vibrate and the air vibrations enter your ear. These are called sound waves.
- If an object is making a sound, a part of it is vibrating, even if you cannot see the vibrations.



## How are shadows formed?

- When light is blocked by an opaque object, a dark shadow is formed. An opaque material blocks light so we can't see through it and shine a light through it.
- When light is shone onto a transparent object, the light travels through it, we can see through it and it makes a very faint shadow.
- When light is shone onto a translucent object, some of the light travels through it, we can see bright light sources through it and it makes a fairly dark shadow.
- The size of a shadow changes as the light source moves. The further away the light source is, the smaller the shadow is. The closer the source of the light, the bigger the shadow.