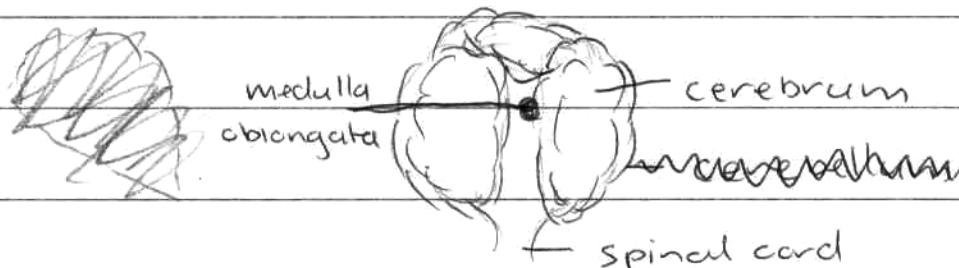


Q28 - communication

- a) The organ of corti vibrates the sound waves allowing hearing to occur.
- aii) A flatter wavelength means a lower frequency and low pitch. A bumpier wavelength means a high frequency and high pitch, sound.
- aiii) Fish can rub their gills together or vibrate their swim bladder to produce sound. whereas some insects rub together the veins on their legs.
- bi) cerebrum - main part of the brain, ^{and} the largest ~~structure~~ structural feature.
cerebellum - the surface of the cerebrum.
medulla oblongata - in the centre of the brain.

bi)



- cii) ~~the~~ The shorter the focal length is the thicker the lens needs to be. For ^{example} a person who suffers from hyperopia, which is long sighted, needs ~~a~~ convex lenses, and someone with myopia needs concave lenses.
- ciii) Human eyes can accommodate to focus on objects at different distances. For objects that are close up the ciliary muscles contract pushing the lens outwards, this is why the thicker lens is needed for shorter focal lengths. When focusing on objects at a distance the ciliary muscles relax, making the lens flatter, therefore a thinner lens is needed for longer focal lengths.
- d) The retina contains photoreceptors which allow us to see light. These light sensitive pigments absorb blue, green and red light allowing us to see during the day. The retina then ~~turns~~ turns this information into a nerve impulse or electrochemical signal which is sent through the optic nerve to the brain.

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Biology

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