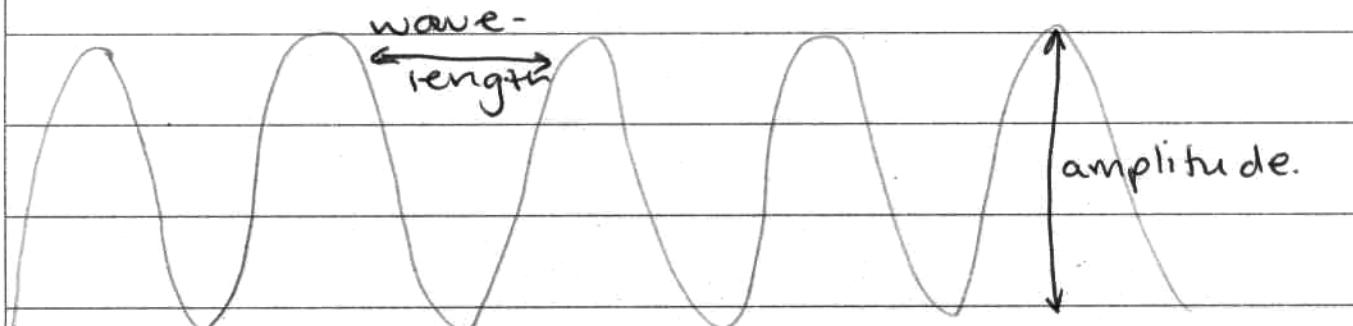


## Question 28

a) (i) The organ of Corti is in the cochlear duct and ~~has~~ <sup>are</sup> tiny fine hairs that receive vibrations that are transmitted into sounds by the brain.

(ii) A wave length, frequency and pitch are produced by sound.



\* a wave length is the length between each wave

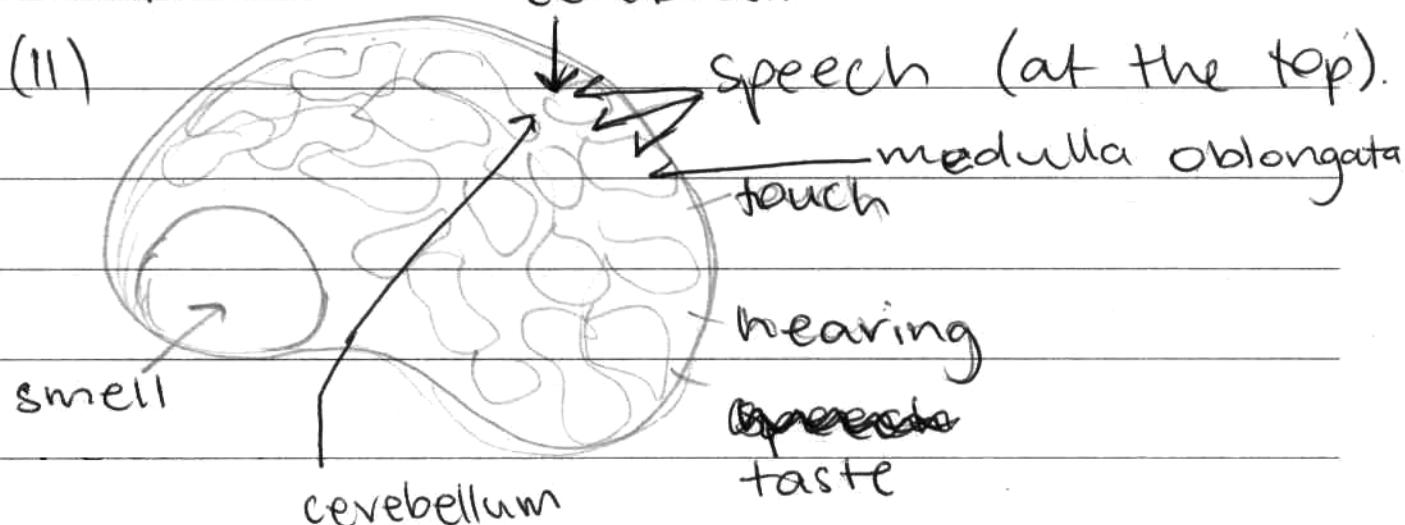
\* frequency is the number of waves produced.

\* pitch is also known as amplitude or volume. This is measured in decibels. You can have high and low pitch.

(a) (iii) Two structures ~~so~~ such as a voice box and wings allows animals to produce sounds.

The voice box in dogs for example allows them to bark or woof. Wings on ~~a~~ insects allows them to clasp together to produce sound.

(b) (i) Cerebrum - towards the top of the brain, usually a white matter  
 Cerebellum - usually a white matter, underneath the cerebrum  
 medulla oblongata - usually a grey matter.



(c) (i)

(i) As the thickness of the lens decrease, the focal length increases  
(ii) The human eye can focus because of the accommodation of the eye. If looking at something in the distance our lens become thin so we can see. As stated in the table, 10 mm lens has a focal length of 12.5 cm, therefore accomodating the eye.

(d) The retina ~~transforms~~ transforms light signals into electrochemical signals. This happens by photoreceptor cells, and ~~chemer~~ chemical receptor cells. Cone and rod cells detect light. The chemical receptor cells detect the light which then

transforms in to electro chemical signals

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**Biology**

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This page is to be detached, completed and attached to the inside front cover of your writing booklet for the option question you have attempted.

Focal lengths of lens

