

Edexcel (A) Biology A-level

CP18 - Habituation to a stimulus

Flashcards

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What is habituation?



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Decreasing of an innate response to a stimulus, when the stimulus is repeated over time and learned to be benign.



Outline the procedure to this practical.



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1. Dampen the cotton wool bud in distilled water.
2. Touch the snail between the eye buds with the cotton wool bud.
3. Time the length of time it takes for the snail to emerge fully from its shell again.
4. Repeat for a total of ten touches.



Which test can be used to draw a conclusion and why?



Which test can be used to draw a conclusion and why?

Spearman's rank correlation, data is ordinal/discontinuous



Why does the snail become habituated to the stimulus?



Why does the snail become habituated to the stimulus?

Calcium channels become less responsive to the stimulus, less neurotransmitters are released into the synaptic cleft, so the time taken for the snail to re-emerge decreases.

