**Unit B6 Statements**

Learning and conditioning

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| --- | --- | --- | --- | --- |
| **1** | the cerebral cortex is the part of our brain most concerned |  | The Prozac molecule blocks the re-uptake of serotonin from a synapse. |  |
| **2** | scientists can map the regions of the brain to particular functions (including  studies of patients with brain damage, studies in which different parts of the brain are  stimulated electrically, |  | Whenever we have a new experience, a new pathway in the brain is used. Each new experience changes our behaviour - this is called **learning**. |  |
| **3** | **Serotonin** is a chemical released in the brain that gives feelings of pleasure. |  | and brain scans such as MRI, showing brain structure and activity). |  |
| **4** | evolution of a larger brain gave |  | with intelligence, memory, language and consciousness |  |
| **5** | **Prozac** is an anti-depressant drug that causes serotonin concentration to build up in synapses. |  | Lack of this chemical can lead to feelings of depression. |  |
| **6** | The human brain consists of billions of neurons. These neurons are connected together to form even more billions of different pathways. |  | early humans a better chance of survival |  |
| **7** | humans are more likely to remember information if: |  | 1. The dog salivates naturally when given food 2. Pavlov rings a bell every time the dog eats 3. After much repetition the dog salivates when the bell rings, even when there is no food. |  |
| **8** | A Russian scientist called **Pavlov** trained dogs to expect food whenever he rang a bell. The dogs eventually produced saliva when they heard the bell ring. |  | a. they can see a pattern in it (or impose a pattern on it)  b. there is repetition of the information, especially over an extended period of time  c. there is a strong stimulus associated with it, including colour, light, smell, or sound |  |
| **9** | Short term memory is capable of storing a limited amount of information for |  | a loss of short-term memory. They may not remember what day of the week it is, but they can remember details of their childhood. |  |
| **10** | Long term memory is when more |  | a limited amount of time. |  |
| **11** | People with Alzheimer's disease suffer |  | The food is the primary stimulus, the human entering the room is the secondary stimulus. |  |
| **12** | Another example of conditioning is a goldfish expecting food when seeing a human in the room. A goldfish swims to the front of the bowl when the human appears. |  | information is stored over a much longer time. |  |

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