

## Animal Survival      *Checklist*

### Responding to the Environment (\* = Credit outcomes)

1.      Animal behaviour is affected by environmental factors such as **moisture/humidity**, **light** and **chemicals**. These are termed **stimuli**.
  
2.      Woodlice **move towards moisture**.  
         \*This is necessary to maintain their breathing system in a moist state to allow them to carry out gas exchange.  
         Maggots **move away from light**.  
         \*This tends to keep them within their food supply (dead bodies).  
         . *Euglena* **moves towards light**.  
         \*This allows it to carry out photosynthesis.
  
3.      **Rhythmical behaviour** occurs when environmental conditions **change on a regular basis**. The stimulus which sets off rhythmical behaviour is called a **trigger stimulus**.
  
4.      Examples of rhythmical behaviour are
  - (i) **hibernation** where the trigger stimulus is **decreasing day length** and **decreasing temperature**
  - (ii) **migration** where the trigger stimulus is **decreasing day length**
  - (iii) **shore crab activity** where the trigger stimulus is **high tide**.
  
- 5.\*      Hibernation is beneficial in that it **conserves energy** when food is unavailable.  
         Migration is beneficial in that it **allows breeding** to take place where **food is abundant**.  
         Tidal activity is beneficial in that **energy is only expended** when the **chances of food being available is high**.