**BURNS 2017** 



## How do you feel today?

Include words which describe what your body is doing or feeling (ie: cold, shivering, anxious, shaking, happy, energetic...)



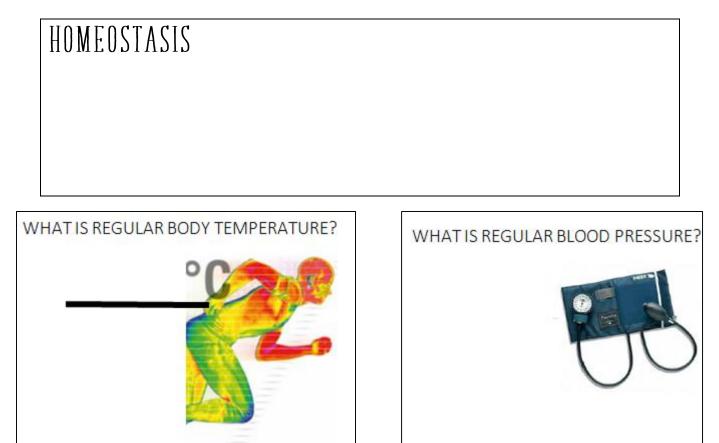
Think about when you last felt sick (regular cold or flu)...how did you feel?

Use descriptive words about what your body was doing / feeling.

## Think about when you exercise... how do you feel?

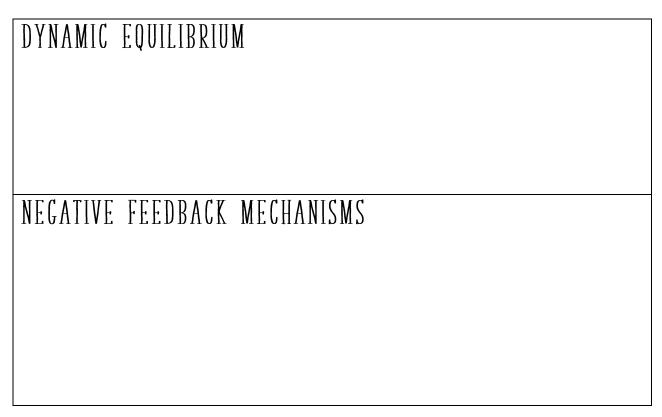
Use descriptive words to explain what your body does / feels.

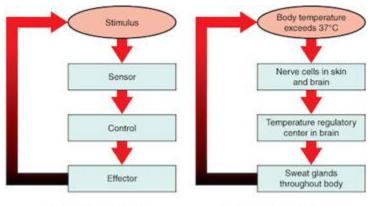




In order to function properly, homeostatic mechanisms must allow the body to:

- .
- .
- •.
- .
- .
- .

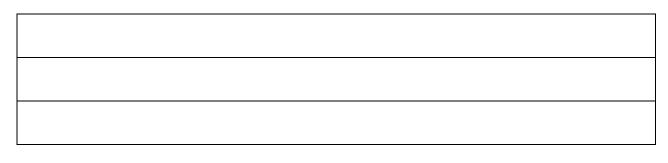




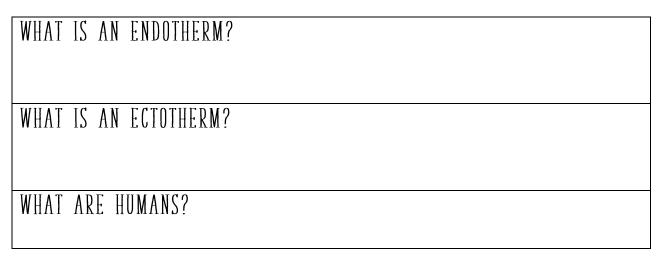
(a) Negative feedback loop

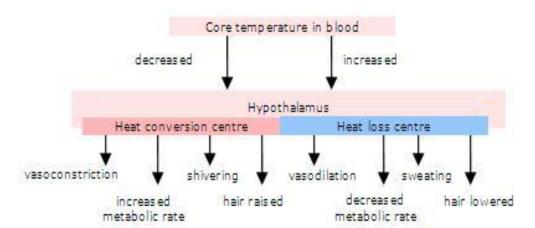
(b) Body temperature regulation

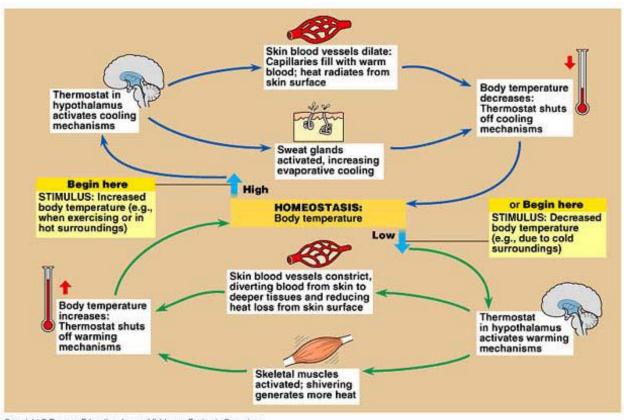
## **3 MAIN HOMEOSTATIC SYSTEMS:**



Animals that maintain a fairly constant body temperature (birds and mammals) are called endotherms, while those that have a variable body temperature (all others) are called ectotherms. Endotherms normally maintain their body temperatures at around 35 - 40°C, so are sometimes called warm-blooded animals, but in fact ectothermic animals can also have very warm blood during the day by basking in the sun, or by extended muscle activity (e.g. bumble bees, tuna). The difference between the two groups is thus that endothermic animals use internal corrective mechanisms, whilst ectotherms use behavioural mechanisms (e.g. lying in the sun when cold, moving into shade when hot). Such mechanisms can be very effective, particularly when coupled with internal mechanisms to ensure that the temperature of the blood going to vital organs (brain, heart) is kept constant. We use both!







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