Year 13 Science: Homeostasis: how animals keep their internal environment stable

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. Name the control centre for body temperature and for water balance.

2. In the class's data, by how much did the core temperature fall in the 10 minutes after exercise?

3. After a big lunch, which hormone rises and which cells release it?

4. Explain how ADH reduces the volume of urine.

5. Why does a skink bask on a rock in the morning?

6. A runner loses 2 L of sweat in a hot half marathon. Explain how the body reduces further water loss.

7. Why does glucose stay high after meals in type 1 diabetes?

8. Explain why hypothermia gets worse faster once the core falls below about 32 °C.

Fix the mistake

9. Correct this statement: "When you are hot, the blood vessels move closer to the skin."

10. Correct this statement: "Glucagon is stored in the liver and turned into glucose."

11. Correct this statement: "Negative feedback keeps the temperature at exactly 37 °C."

12. Correct this statement: "Ectotherms are cold-blooded, so they cannot control their body temperature."