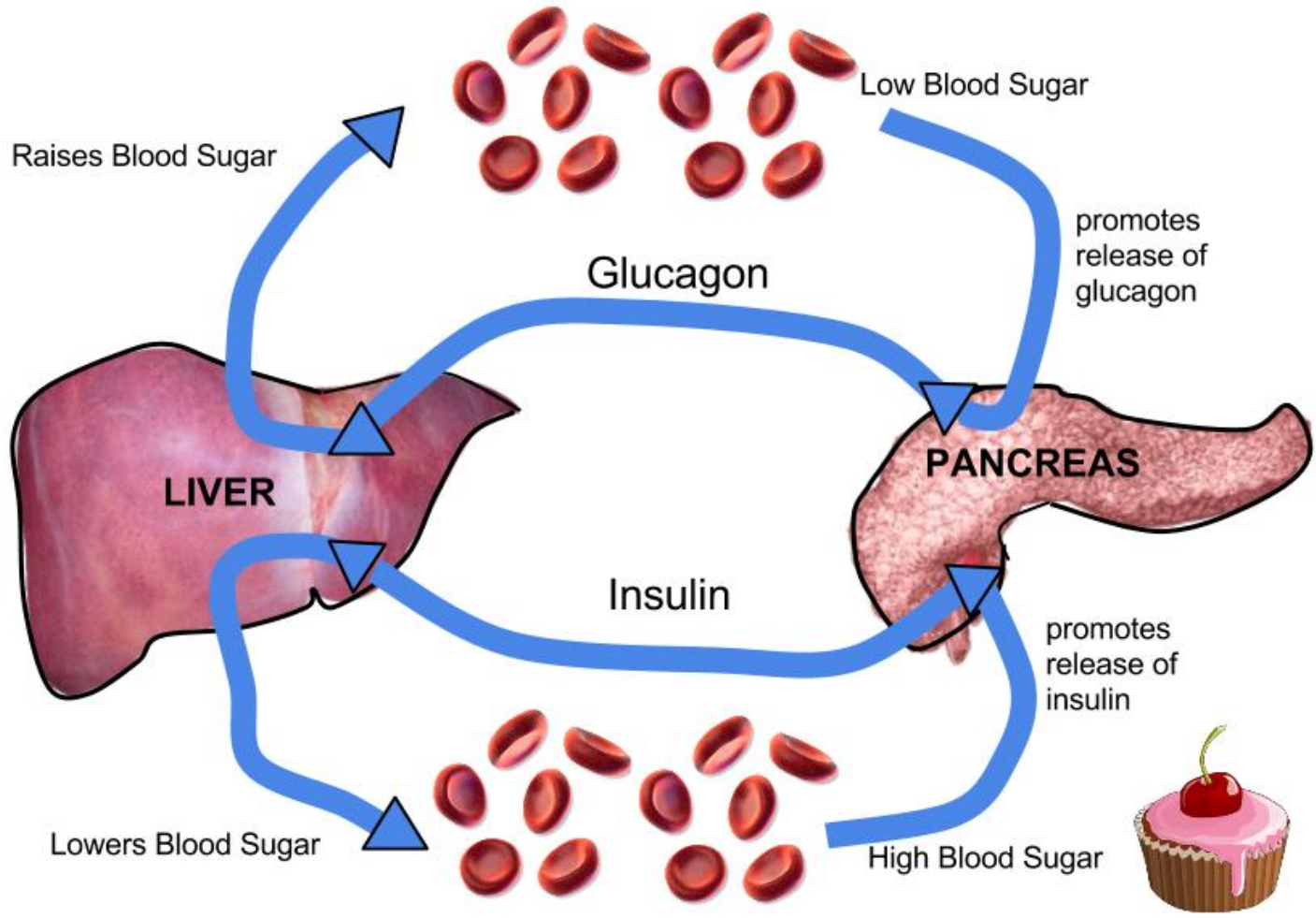
Name: _____

Feedback Loops- Interpreting Graphics

The control of blood sugar (glucose) by insulin is a good example of a negative feedback mechanism. When blood sugar rises, receptors in the body sense a change . In turn, the control center (pancreas) secretes insulin into the blood effectively lowering blood sugar levels. Once blood sugar levels reach homeostasis, the pancreas stops releasing insulin.



1. Insulin and glucagon are both hormones that work opposite to each other. Explain what each of these hormones regulate?

2. When you eat a cupcake, the pancreas will be stimulated to release what hormone?

3. If too much insulin is released, you may have a sharp drop in your blood sugar. How would the pancreas respond to this drop?

4. Diabetics are unable to produce maintain their body's blood sugar at proper levels.
What organ(s) is responsible for this problem?

5. Explain how the thermostat in your house uses a negative feedback system to maintain your home's temperature.