How do animals use hormones for communication?

1. Be able to define the terms "hormone" and "endocrine system".

2. Name the three classes of hormones and indicate the water solubility and general mechanism of action for class; which hormones utilize second messengers and which act within the nucleus?

3. Regarding hormones of the thyroid gland:
   
   Name the two hormones and indicate how they differ from other amine hormones.

   Describe, in general terms, how circulating levels of thyroid hormones are regulated.

   Indicate the result of an iodine deficient diet.

   Indicate problems that occur in hypothyroidism vs. hyperthyroidism.

4. Regarding hormones of the pancreas:
   
   Name the two hormones and indicate the function of each.

   Describe how insulin increases glucose uptake by cells.

   Name two forms of diabetes and indicate how each is caused; what is the role of obesity?