## **Thyroxine Worksheet**

## Put all the names in your group on this sheet!

The thyroid gland produces hormones that help regulate body temperature, metabolic rate, reproduction, growth, the synthesis of red blood cells, and all sorts of essential bodily functions. Iodine must be present in the diet for thyroid hormones to be produced. Iodine deficiency can lead to sluggishness, weight gain, and severe birth defects.

One iodine-containing hormone produced by the thyroid is "Thyroxine". The line drawing for the compound Thyroxine is given below:

What is the correct chemical formula for Thyroxine?

What is the molar mass of Thyroxine?

A typical human adult ingests about 210 mg of iodine per day. If all this iodine was used by the thyroid gland to produce thyroxine, how many mg of thyroxine could be produced by a human in one day? (Use reverse side to set up).