1. Draw  $\alpha$ -D-glucose.

2. Draw lactate.

- 3. How many total (all together) C-C and C-H bonds are present in glucose?
- 4. How many total (all together) C-C and C-H bonds are present in <u>two</u> lactate molecules?
- 5. What is the numerical difference between your answers for #3 and #4?
- 6. How many redox reactions occur in the pathway of glucose becoming two 2-lactate molecules?

7. Identify the enzymes that catalyze the redox steps.