



Pre-lab questions:

1. Name three non-human things you might see on your way to school that contain DNA.
2. Have you ever eaten DNA? If so, when?
3. Today, we'll be extracting DNA from wheat germ. What do you already know about wheat? What do you already know about wheat germ?

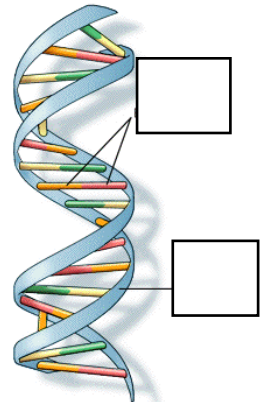
During-lab observations: Write and sketch what you see. Write down any questions you have!

Before rehydration (initial obs.)	After rehydration + inverting tube 40 x's	After soap addition + inverting tube 40 x's	After ethanol addition /precipitate formation

Post-lab questions:

1. Even though we could not see the structure of DNA using our extraction method, DNA forms a "double-helix", shown to the right (borrowed from *US National Library of Medicine*). This discovery of this structure is credited to Dr. James Watson and Dr. Francis Crick. Please label the parts of the diagram (do an internet search, if needed).

A – nitrogenous base pairs
B – sugar-phosphate backbone



U.S. National Library of Medicine

2. What purpose did soap serve in our experiment? What about ethanol?
3. Why might scientists want to extract DNA from wheat?
4. You overhear a friend at lunch saying that her peanut butter and jelly sandwich does not have DNA in it because it is not alive. Why is your friend mistaken?