**Activity #9**

**Name:**

**High School:**

**HSTA Teacher:**

1. In which cellular compartment do you expect to find DNA?

2. Does a liver cell contain the same DNA as a cheek cell? Explain.

3. Once the membranes have dissolved, the DNA is released into the solution, but so are many other types of cellular molecules. List some types of molecules besides DNA that you would expect to find in the cell.

4. Sugar and salt look similar and are about the same size. Could you have used sugar in place of the salt in this experiment? Explain.

5. Individual strands of DNA are not visible to the naked eye. Why are we able to see our DNA at the end of this experiment?

6. Match the outcomes on the left with the laboratory steps on the right.

A. Gently chew the

insides of your mouth

and then rinse vigorously

with water

\_\_\_\_Harvest the cells

\_\_\_\_Dissolve cell membranes B. Layer cold alcohol over cell extract

\_\_\_\_Precipitate the DNA C. Mix in a detergent solution

\_\_\_\_Aggregate the DNA D. Add Salt