**DNA Isolation from Strawberries Student Directions**

**Materials per student group:**

• 1 strawberry. Frozen strawberries should be thawed at room temperature.

• 10 ml DNA Extraction Buffer (soapy salty water)

• 20 ml ice cold 91% isopropyl alcohol

• 1 Ziploc TM bag

• 1 clear test tube

• 1 coffee filter or cheesecloth

• 1 coffee stirrer or wooden stick

• 1 piece of black construction paper to lay out DNA

**Directions**

1. Place strawberries into a Ziploc bag and seal shut.

2. Squish for a few minutes to completely squash the fruit.

3. Add 10 ml DNA Extraction Buffer (soapy salty water) and squish for a few more minutes. Try not to make a lot of soap bubbles.

4. Filter through a moistened paper towel set in a funnel, and collect the liquid in a clear tube. Do not squeeze the paper towel. Collect about 3 ml liquid.

5. Add 2 volumes ice cold isopropyl alcohol to the strawberry liquid in the tube. Pour the isopropyl alcohol carefully down the side of the tube so that it forms a separate layer on top of the strawberry liquid.

6. Watch for about a minute. What do you see? You should see a white fluffy cloud at the interface between the two liquids. That’s DNA!

7. Spin and stir the coffee stirrer or transfer pipet in the tangle of DNA, wrapping the DNA around the stirrer.

8. Pull out the stirrer and transfer the DNA to a piece of black construction paper. The fibers are thousands and millions of DNA strands.

9. Clean up!