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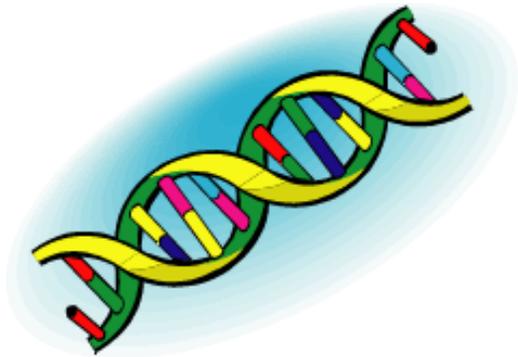
Date: \_\_\_\_\_



## Week 2 - Strawberry DNA

Materials:	Amount:
<i>Rubbing alcohol</i>	2 oz
<i>Salt</i>	1/2 spoonful
<i>Water</i>	1/6 cup
<i>Dish detergent</i>	1 spoonful
<i>Plastic cups</i>	1 clear and others
<i>Plastic spoon</i>	1
<i>Strawberries</i>	2 large (or 3 small)
<i>Sandwich bags</i>	2
<i>Toothpick</i>	1

### What is DNA?



### Procedure:

WARNING: LISTEN CAREFULLY TO SCOUT INSTRUCTIONS TO STAY SAFE!

1. To make the extraction liquid, mix salt, water, and detergent in a cup. Save this mix for later.
2. Put strawberries in a plastic bag, and get rid of extra air. Seal the bag tightly.
3. Use your fingers to squeeze and mash the strawberries in the bag for 2 minutes.
4. When done, use a plastic spoon to remove chunks. There should only be a thick liquid left.
5. Add the extraction liquid from step 1 to the mashed strawberries. Mix around in the bag for around 1 minute.
6. Pour the final mix into a clear cup to about 1/3 full. Remove any surviving chunks.

WARNING: LEAVE STEP 7 TO THE SCOUTS! DO NOT TOUCH, SNIFF, OR DRINK THE ALCOHOL!

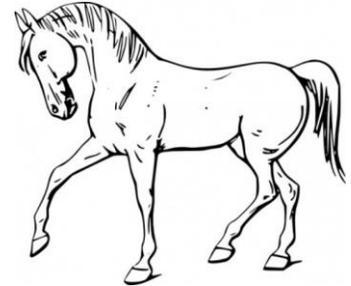
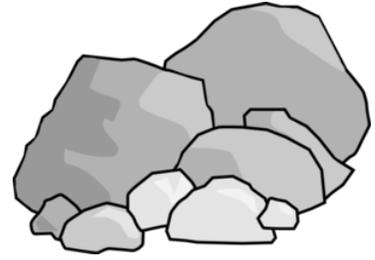
7. SCouts: tilt the cup at a slight angle, and slowly pour the alcohol in. Do not let the alcohol mix with the strawberry mash. The alcohol should sit in a layer on top of the cup.

WARNING: DO NOT MIX THE ALCOHOL AND STRAWBERRY MASH WITH SHAKING OR TOOTHPICKS!

8. Wait for about a minute. Watch as the DNA moves from the strawberry mash to the alcohol. What does the DNA look like?
9. Use toothpicks to touch the DNA in the cup.

**DNA** is a large molecule that all living things have. It is the blueprint that makes not only different species unique but also individuals of a species unique. Each organism has a different collection of **DNA** which is contained in all of its cells - the basic units of life. The **DNA** acts as a code of instructions that guides cells and so describes everything about the organism. **DNA** determines how an organism will look like and (sometimes) how an organism will behave.

**Question 1:** Circle the following pictures of things that have DNA.



**Question 2:** Draw two living things, and then draw what it would look like if you mixed their DNAs together.

**Bonus Question:**

What does DNA stand for?

