

Strawberry DNA

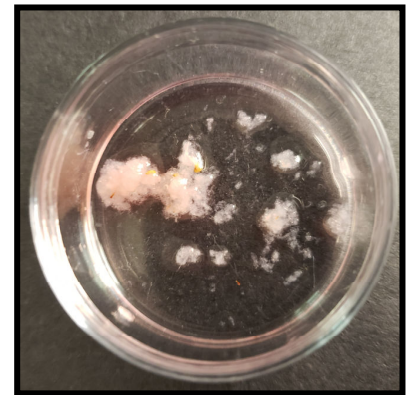
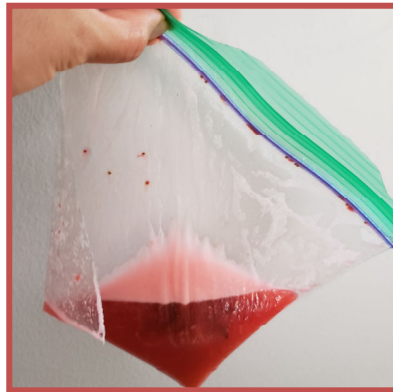
You can extract Strawberry DNA with supplies you probably already have at home!! DNA is short for deoxyribonucleic acid. It is the material that carries all the information about how a living thing will look and function.

Time to complete: 30 min.

Age Group: 7+ yrs.

Materials:

- Cup
- Measuring cup & spoon
- Zip top bag
- Sieve or coffee filter
- Water
- Dish soap
- Salt
- Rubbing (isopropyl) alcohol



Instructions:

1. Put the bottle of rubbing (isopropyl) alcohol in the freezer.
2. If you don't know what DNA is do a little research or watch a little video.
3. Pour 90ml of water into a small cup. Add 10ml or dish detergent and $\frac{1}{4}$ tsp salt. Stir until salt is dissolved.
4. Pour the solution you just made in a zip top bag and add your strawberry. Remove as much air as possible from the bag and seal it.
5. Smush the strawberry with your fingers and break it apart until there are no big chunks.
You are breaking down the strawberry; the soap is breaking down the strawberry cell membranes; the salt helping release the DNA strands by breaking up protein chains.
6. Pour the liquid and mush from your bag through your sieve or coffee filter back into your small cup.
7. Gently add 1 tsp of cold rubbing (isopropyl) alcohol. Let it sit for a moment and watch as little strands like a cloud start to form. That is the DNA! You can scoop it out with a toothpick and if you separate it, you can see the long individual strands.