

Strawberry DNA Extraction

Materials

- 1/3 cup of warm water
- ½ tsp of salt
- 1 tbsp of dish soap
- Ziploc Bag
- Golf ball sized strawberries (1-5)
- Chilled 70% Isopropyl Alcohol (Rubbing Alcohol)
- Mesh Strainer or Cheese Cloth

PRECAUTIONS: DO NOT DRINK ANY OF THE SOLUTIONS MADE IN THIS ACTIVITY OR EAT ANY FRUITS THAT HAVE BEEN IN CONTACT WITH ANY OF THE SOLUTIONS AND/OR ISOPROPYL ALCOHOL. MAKE SURE TO HAVE A RESPONSIBLE ADULT PRESENT.

Procedure

1. Place the rubbing alcohol in the freezer so that it can chill.
2. Completely mix the water, salt, and dish soap until the salt and soap is fully dissolved.
3. Cut the stems off of the strawberries, place them inside the Ziploc bag, add about 3 tbsp of the salt and soap mixture, and seal the bag (making sure to get as much air out as possible.)
4. Mash up the strawberries really well until it is all pulpy and no large pieces remain.
5. With your metal strainer or cheesecloth, strain out all the liquid into a separate clear cup. Discard any solid pieces of strawberry that remain.
6. Carefully pour the rubbing alcohol against the side of the glass containing the strawberry liquid so that the rubbing alcohol sits on top.
7. Watch as the DNA strands—the white, stringy fibers— precipitate out into the rubbing alcohol! Mixing the strawberry-alcohol solution may yields better results as well.