GLOW-IN-THE-DARK JELLO!

Hey Explorers, have you ever seen a plant, animal, or substance that… glows in the dark?

This happens because of a property called Luminescence and in this experiment, we're going to use a natural, edible, Fluorescent chemical called Quinine, found in common Tonic Water to make a tasty treat that has its own eerie glow.

MATERIALS

- *PACKET OF GELATIN POWDER - GREEN JELLO IS THE MOST FLUORESCENT*
- *2 CUPS OF TONIC WATER - 1 CUP COULD BE JUST WATER, SEE STEP 4*
- *MEASURING CUP*
- *POT*
- *STOVE*
- *BOWL*
- *SPOON*
- *FRIDGE*
- *TIME*
- *BLACKLIGHT - COULD BE A FLASHLIGHT OR LAMP*

PROCEDURE

1. MEASURE 1 CUP OF TONIC WATER, PUT IT IN YOUR POT, THEN PLACE YOUR POT ON THE STOVE OVER HIGH HEAT, BRINGING IT TO A BOIL. YOU CAN ALSO USE A KETTLE FOR THIS.
2. WHILE THE TONIC WATER BOILS, PUT YOUR JELLO PACKET INTO YOUR BOWL.
3. WHEN THE TONIC WATER IS BOILING, CAREFULLY REMOVE IT FROM THE STOVE AND POUR IT INTO THE BOWL WITH THE POWDER. STIR WITH THE SPOON UNTIL THE POWDER IS FULLY DISSOLVED.
4. ADD ANOTHER CUP OF COLD TONIC WATER TO THE BOWL. THIS COULD BE REPLACED WITH REGULAR WATER WHICH WILL REDUCE THE BITTER TASTE OF THE TONIC WATER FROM THE FINISHED JELLO. YOU CAN ALSO COUNTERACT THE BITTERNESS BY ADDING WHIPPED CREAM OR FRUIT.
5. IF USING A MOLD, BE SURE TO COAT IT WITH COOKING SPRAY FIRST TO REDUCE STICKING.
6. COOL IN THE FRIDGE FOR 4 HOURS OR MORE, OVERNIGHT IS BEST.
7. REMOVE IT FROM THE FRIDGE AFTER THE TIME IS UP, TURN OFF ALL OTHER LIGHTS, AND SHINE YOUR BLACK LIGHT ON IT! THE FLUORESCENT QUININE WILL ABSORB THE ULTRAVIOLET LIGHT, CHANGE ITS WAVELENGTH, AND SHINE IT BACK OUT AS PART OF THE VISIBLE LIGHT SPECTRUM! GLOWING JELLO!

CLAYTON'S EXPLORATION STATION

THIS EXPERIMENT IS GREAT FOR BEGINNER EXPLORERS, USES HOUSEHOLD ITEMS (THOUGH A SHORT SHOPPING TRIP MAY BE NEEDED FOR A BLACKLIGHT), AND REQUIRES ADULT SUPERVISION FOR USE OF THE STOVE.