MAKING A DENSITY COLUMN!

Have you ever seen a tower made of different kinds of liquids all stacked up on top of each other?

This is possible by using liquids with different densities; how closely packed the molecules are!



MATERIALS

EQUAL PORTIONS OF LIQUID MATERIAL, WE'RE USING 3 OUNCES OF EACH:

- HONEY
- CORN SYRUP
- MAPLE SYRUP
- WHOLE MILK
- DISH SOAP
- WATER
- VEGETABLE OIL
- RUBBING ALCOHOL
- · LAMP OIL

OTHER ITEMS YOU'LL NEED:

- CLEAR COLUMN CONTAINER
- 9 RAMEKINS OR CUPS
- TURKEY BASTER
- FOOD COLOURING

YOU'LL WANT SMALL HOUSEHOLD ITEMS OF VARYING WEIGHT TO TEST THEIR DENSITY AGAINST THE LIQUID COLUMN. SOME EXAMPLES ARE: MARBLE, POPCORN KERNEL, GAME DIE, PLASTIC SODA CAP, BIRTHDAY CANDLE, SCREW, STRAWBERRY.



- 1. POUR EQUAL AMOUNTS OF EACH LIQUID INTO CONTAINERS.
- 2. WEIGH THE LIQUIDS AND RECORD THE WEIGHT. PUT THEM IN ORDER FROM HEAVIEST TO LIGHTEST.
- 3. CAREFULLY POUR THE HEAVIEST INTO YOUR COLUMN CONTAINER. USE THE TURKEY BASTER TO CAREFULLY ADD THE REST, IN ORDER OF HEAVIEST TO LIGHTEST.
- 4. AFTER YOUR COLUMN IS BUILT, DROP YOUR HOUSEHOLD ITEMS IN, ONE AT A TIME, AND SEE WHERE THEY STACK UP!



THIS EXPERIMENT IS GREAT FOR BEGINNER EXPLORERS, USES HOUSEHOLD INGREDIENTS, CAN BE MESSY AND REQUIRES ADULT SUPERVISION. TIME AND PATIENCE WILL BE REQUIRED.

