

DOES IT DISSOLVE?

MATERIALS

- VARIOUS SUBSTANCES TO TEST (E.G. SALT, SUGAR, BAKING SODA, SAND, OIL, PEPPER)
- CLEAR CUPS (ONE PER SUBSTANCE)
- SPOONS
- PAPER AND MARKERS



INSTRUCTIONS

1. FILL EACH CUP OR JAR WITH THE SAME AMOUNT OF WATER, ABOUT HALFWAY FULL.
2. CHOOSE ONE SUBSTANCE TO TEST AT A TIME. START WITH SOMETHING EASY, LIKE SALT OR SUGAR.
3. ADD A SMALL AMOUNT OF THE CHOSEN SUBSTANCE TO A CUP OF WATER. STIR THE MIXTURE GENTLY WITH A SPOON.
4. OBSERVE WHAT HAPPENS TO THE SUBSTANCE IN THE WATER. DOES IT DISAPPEAR COMPLETELY, A LITTLE BIT, OR NOT AT ALL? WRITE DOWN OR DRAW A PICTURE OF WHAT HAPPENS.
5. REPEAT STEPS 3-4 FOR EACH SUBSTANCE YOU WANT TO TEST.

EXPLANATION

SUGAR AND SALT ARE WATER'S BEST PALS. THEY LOVE TO MIX TOGETHER, SO WE CALL THEM "SOLUBLE." WHEN YOU STIR SUGAR OR SALT INTO WATER, THEY COMPLETELY DISSOLVE, MAKING THE WATER SWEET OR SALTY! NOT EVERYTHING IS AS FRIENDLY WITH WATER. THINGS LIKE ROCKS AND OIL DON'T LIKE TO MIX WITH WATER AND WE CALL THEM "INSOLUBLE." SO, WHETHER SOMETHING DISSOLVES IN WATER DEPENDS ON WHETHER IT'S SOLUBLE (FRIENDLY) OR INSOLUBLE (UNFRIENDLY) WITH WATER.