ST1913D CAN A CHANGE BE REVERSED?

(music)

Joan Cartan-Hansen, Host: SO, CAN A CHANGE IN A COMPOUND BE REVERSED?

FOR EXAMPLE, YOU CAN BOIL WATER BUT IF YOU CAPTURE AND COOL THE STEAM,

IT RETURNS TO BEING LIQUID.

SO IT CHANGED STATE BUT ALWAYS REMAINED WATER.

CHEMIST CHRIS SAUNDERS DEMONSTRATES A CHANGE TO A COMPOUND THAT CAN’T BE REVERSED.

CHRIS SAUNDERS, CHEMIST: SO WHILE BOILING WATER IS A PHYSICAL PROCESS AND CAN BE REVERSED, A COMBUSTION REACTION OR LIGHTING SOMETHING ON FIRE IS AN EXAMPLE OF A CHEMICAL CHANGE THAT IS IRREVERSIBLE. THAT IS, WHEN YOU TAKE THE HEAT AWAY IT DOESN’T TURN BACK INTO WHAT YOU BURNT. SO WE ARE GOING TO TAKE A PIECE OF THIS (?) COTTON AND TURN IT INTO SOMETHING ELSE. LETS SEE THAT AGAIN.

CARTAN-HANSES: SO SOMETIMES A CHANGE IN A COMPOUND CAN BE REVERSED AND SOMETIMES IT CAN’T.

AND THAT’S PART OF THE SCIENCE OF CHEMISTRY.

FOR MORE INFORMATION ABOUT COMPOUNDS AND CHEMISTRY, CHECK OUT THE SCIENCE TREK WEBSITE.

YOU’LL FIND IT AT IDAHOPTV.ORG/SCIENCE TREK