

LESSON TWO WORKSHEET

TYPES OF PLASTIC

WHAT IS THE RESIN IDENTIFICATION CODE (RIC) SYSTEM, AND WHY WAS IT CREATED?

RIC IS A SYSTEM TO CATEGORISE PLASTIC RESINS INTO 7 GROUPS, INTRODUCED IN 1988 BY THE SOCIETY OF THE PLASTICS INDUSTRY. THE GOAL WAS TO CREATE A NATIONWIDE SYSTEM TO SUPPORT RECYCLING OF USED PLASTIC.

HOW CAN YOU TELL DIFFERENT TYPES OF PLASTICS APART?

PLASTIC ITEMS OFTEN HAVE THE RIC SYMBOL PRINTED ON THEM, AND THE PHYSICAL PROPERTIES (E.G. FLEXIBILITY AND TEXTURE) CAN HELP TOO.

TRUE OR FALSE: PFAS ARE KNOWN AS FOREVER CHEMICALS

TRUE, BECAUSE PFAS DO NOT BREAKDOWN IN THE ENVIRONMENT OR IN HUMAN BODIES.

TRUE OR FALSE: PFAS ARE NATURALLY OCCURRING CHEMICALS

FALSE, PFAS ARE MAN MADE CHEMICALS AND DO NOT OCCUR NATURALLY IN THE ENVIRONMENT

WHY ARE PFAS OFTEN ADDED TO PLASTICS?

PFAS COMPOUNDS ARE OFTEN ADDED TO PLASTICS TO MAKE PRODUCTS RESISTANT TO HEAT, STAINS, GREASE AND WATER.

SHOULD WE BE CONCERNED ABOUT PFAS CHEMICALS? EXPLAIN WHY?

YES WE SHOULD BE CONCERNED BECAUSE EXPOSURE CAN HAVE AN IMPACT ON HUMAN HEALTH.

SOME EXAMPLES INCLUDE:

WOMEN'S REPRODUCTIVE HEALTH, CAUSE DEVELOPMENTAL DELAYS IN INFANTS AND CHILDREN, REDUCE KIDNEY FUNCTION AND INCREASE RISK OF CANCER.

WHAT IS THE SIZE DEFINITION OF A MICROPLASTIC? (CIRCLE ONE)

LESS THAN 1_{CM}

LESS THAN 5_{CM}

LESS THAN 5_{MM}

LESS THAN 1_{MM}

LESS THAN 10_{MM}

LESS THAN 1.5_{MM}

WHAT IS THE DIFFERENCE BETWEEN PRIMARY AND SECONDARY MICROPLASTIC?

PRIMARY MICROPLASTICS ARE INTENTIONALLY PRODUCED SMALL, LIKE BEADS, GLITTER, MICROBEADS IN COSMETICS, AND NURDLES.

SECONDARY MICROPLASTICS COME FROM LARGER PLASTIC ITEMS THAT HAVE BROKEN DOWN INTO SMALLER PIECES.

NAME AND DESCRIBE ONE OF THE MAIN WAYS LARGE BITS OF PLASTIC DEGRADE:

UV DEGRADATION: SUNLIGHT MAKES PLASTIC BRITTLE OVER TIME, CAUSING IT TO BREAK.

MECHANICAL DEGRADATION: FORCES LIKE WAVES BREAK PLASTIC INTO SMALLER PIECES.

BIO DEGRADATION: BACTERIA AND FUNGI CONSUME PLASTIC, BREAKING IT INTO SMALLER PARTS

NAME SOMEWHERE THAT MICROPLASTIC HAS BEEN FOUND:

MICROPLASTICS HAVE BEEN NOW DOCUMENTED PRETTY MUCH EVERYWHERE ON THE PLANET, ANY ANSWER LISTED IS CORRECT