THE FANTASTIC PLASTIC CHALLENGE!

TODAY WE'LL IDENTIFY DIFFERENT TYPES OF PLASTICS AROUND THE HOUSE. WE'LL DISCOVER THE GOOD, THE BAD – AND THE DOWNRIGHT NERDY – ABOUT EACH ONE. THEN WE'LL PLAY A GAME OF TOP TRUMPS TO HELP US THINK ABOUT WHAT WE CAN ALL DO TO BE MORE PLASTIC-SMART.

BE PLASTIC SMART
A DIRT FOR GOOD PROJECT

2hr includes prep & play | low level prep | family fun | hands on learning

we'll learn about...

ENGLISH

by speaking, listening, reading and presenting information

SCIENCE

by finding out about the advantages and disadvantages of different materials

LET'S GET STARTED!

1 Read all about the different types of plastic in the table on the next page. Then, set off on a great plastic hunt! Find an example of each one around the house and match it to the right description.

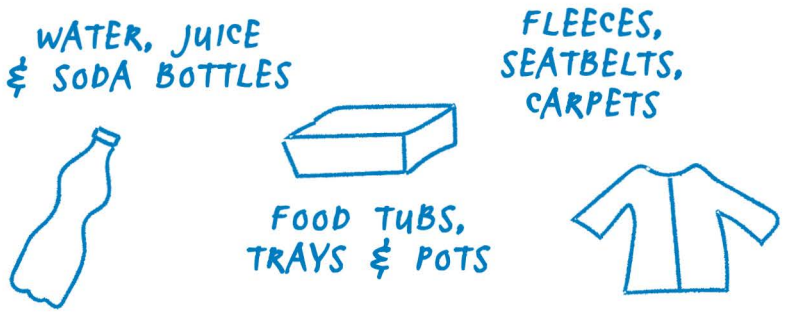
2 Using the plastics that you have found, turn them into a card game adding to the existing six cards within the template provided or make your own! Decide the scores for each category by comparing the plastics with each other to give each one a score out of 100 for their: useful life; how recyclable they are and their environmental impact.

3 Play the game together as a family. Think about the scores of different plastic types, then chat about which you think you should try and reduce around the home.

4 Pin up your pledge sheet with our list of suggestions on the fridge door where everyone can see it. Feel free to add your own!

THERE ARE 7 DIFFERENT TYPES OF PLASTIC

They all have their uses, but they can all cause problems for the planet too. Let's take a look at them.



A very commonly used plastic, PET can **only be used once** for food or drinks as it becomes **toxic. Easily recycled** into fibres called polyester to make new bottles or other things like fleece and carpets.

1
PET
polyethylene terephthalate

A **durable, non-toxic** plastic. It can be **readily recycled** into new items for outdoor use like bins, benches, or planters.

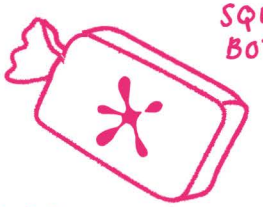
2
HDPE
high-density polyethylene

A strong, versatile, **bendable** plastic. It **cannot be recycled**, and the creation and breakdown of PVC causes the release of the **worst toxins of any plastic type.**

3
PVC
polyvinyl chloride

SINGLE-USE CARRIER BAGS

SHRINK WRAP PACKAGING OF GOODS FOR TRANSPORTING & DELIVERY



SQUEEZY BOTTLES

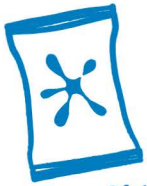
FOOD PACKAGING BAGS (EG BREAD)

Generally, a thin, durable, see-through plastic film. Can be safely **reused**. **Harder to recycle** but some supermarkets have LDPE bag collection schemes. Easily ends up in the **marine environment** harming animals and birds.

4

LDPE

low-density polyethylene



CRISP PACKETS

DRINKS STRAWS

BREAKFAST CEREAL INNER BAGS

DAIRY PRODUCT PACKAGING, EG YOGURT & BUTTER TUBS

PLASTIC BOTTLE CAPS

NAPPIES

A lightweight plastic which acts as a barrier to grease, liquids, and chemicals. PP is **not easy to recycle** but it can be **safely reused** compared to other plastics. Recycling schemes are available in some areas.

5

PP

polypropylene

BIKE HELMET

EXPANDED FOAM BLOCKS TO PROTECT GOODS DURING TRANSPORTATION

SINGLE USE FOOD & DRINK CONTAINERS SUCH AS CUPS, CARTONS & CUTLERY

FOAM CHIPS FOR PACKAGING

PS is a lightweight, stiff but weak-structured plastic which is **cheap** to make. The 'styrene' can leak out and is very **toxic**. It is expensive to recycle, and the service is not really offered anywhere. Fragments of PS in the environment **can cause a lot of harm**.

6

PS

polystyrene

SIPPY CUPS

WATER COOLERS

INDUSTRIAL EQUIPMENT

CAR PARTS

BABY BOTTLES

LININGS & COATINGS

TOILET SEATS

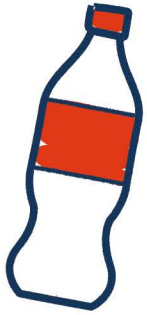
7 refers to all other plastic types including those made of mixed plastics, combined with other materials and **'bioplastics'** which need to be sent for **commercial composting but never recycled**. 7 is a confusing category and **very hard to recycle correctly**.

7

OTHER

other

#1 PET: SODA BOTTLE



USEFUL LIFE	10
HOW RECYCLABLE	100
IMPACT ON ENVIRONMENT	60

#6 PS: BIKE HELMET

USEFUL LIFE	50
HOW RECYCLABLE	0
IMPACT ON ENVIRONMENT	30

#5 PP: DRINKS STRAW

USEFUL LIFE	1
HOW RECYCLABLE	0
IMPACT ON ENVIRONMENT	95

MAKE YOUR OWN CARD GAME!

From what you've just learnt - first fill out the rest of our ready-started cards, then continue to make your very own. Next cut them out and play against eachother!

#4 LDPE: BREAD BAG

USEFUL LIFE	25
HOW RECYCLABLE	25
IMPACT ON ENVIRONMENT	70

#3 PVC: CLINGFILM WRAP

USEFUL LIFE	1
HOW RECYCLABLE	0
IMPACT ON ENVIRONMENT	100

#2 HDPE: MILK BOTTLE

USEFUL LIFE	25
HOW RECYCLABLE	100
IMPACT ON ENVIRONMENT	30

THE RULES

Divide the cards evenly between the players. Take it in turn to choose a category, if you have the better score for that category, you win the card. If they have the better score, they win the card. Keep going until someone has all the cards, and is therefore the winner!

USEFUL LIFE

HOW RECYCLABLE

IMPACT ON ENVIRONMENT

USEFUL LIFE

HOW RECYCLABLE

IMPACT ON ENVIRONMENT

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USEFUL LIFE

HOW RECYCLABLE

IMPACT ON ENVIRONMENT

CUT ME OUT AND STICK ME TO THE FRIDGE OR PINBOARD!

SCORE BOARD

1

2

3

4

5