



Amazing PET

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INDORAMA
VENTURES

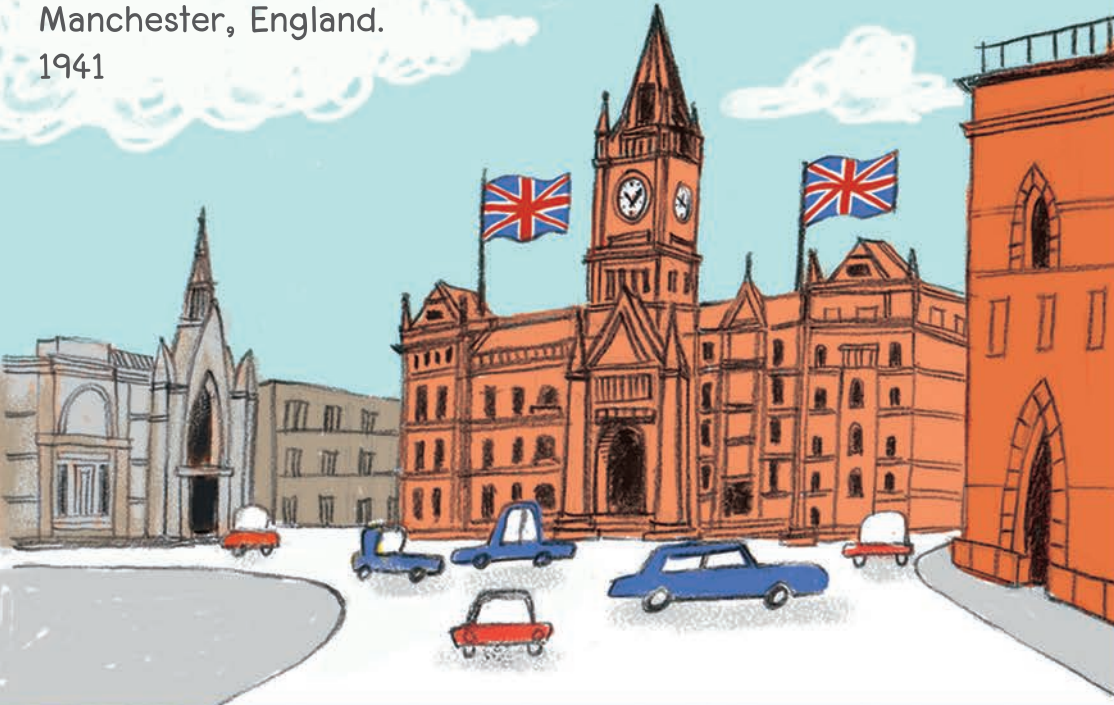


Content verified by :

Thailand Institute of Packaging and Recycling Management for Sustainable Environment (TIPMSE)



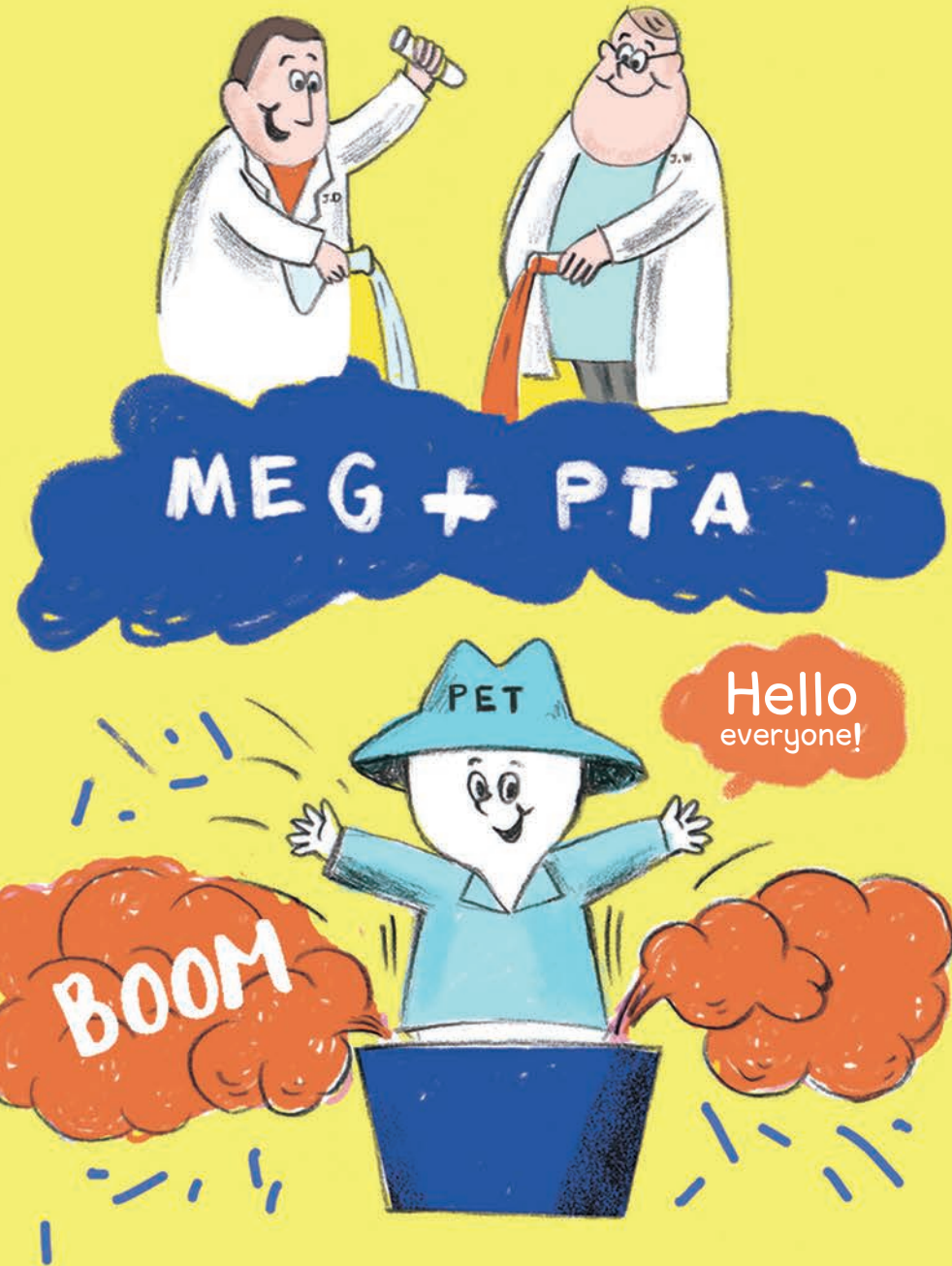
Manchester, England.
1941



John Rex Whinfield and James Tennant Dickson, two British chemists, are hard at work in their laboratory.



PET was discovered from chemical condensation experiments in one of two main polymer syntheses. Two key parts in the experiment were MEG and PTA.



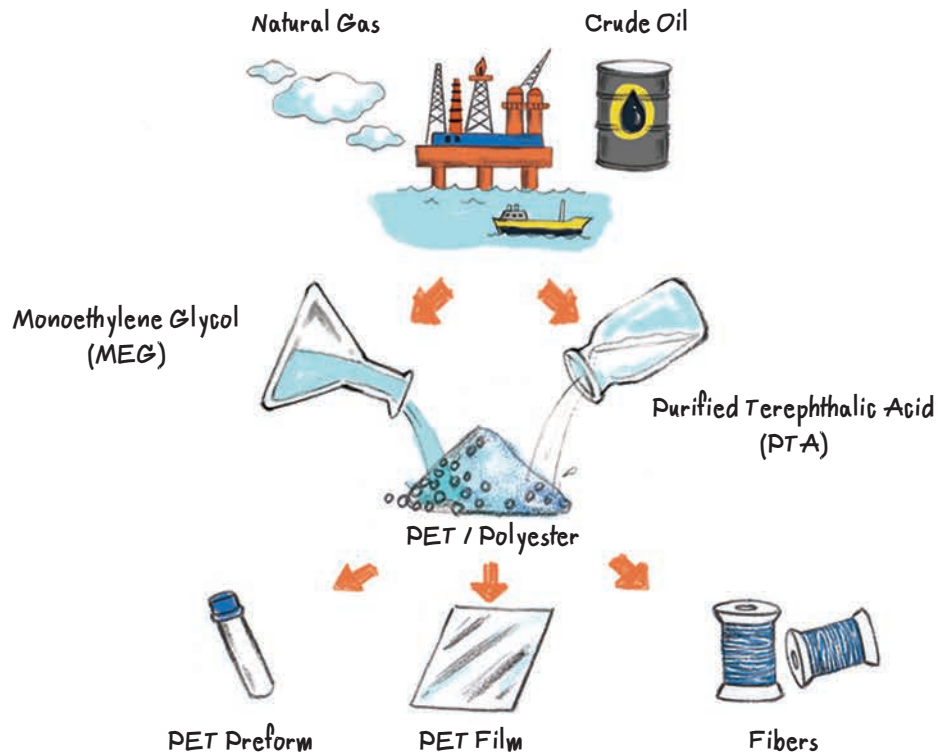


Hello, my name is PET. It stands for my full scientific name,
– Polyethylene Terephthalate. It's a bit hard to say,
so why not just call me PET? It's a lot easier.
Do you know who I am ? I bet you do !
I will let Mr. Whinfield explain
more about me, okay?

Let's begin with
how PET is made.

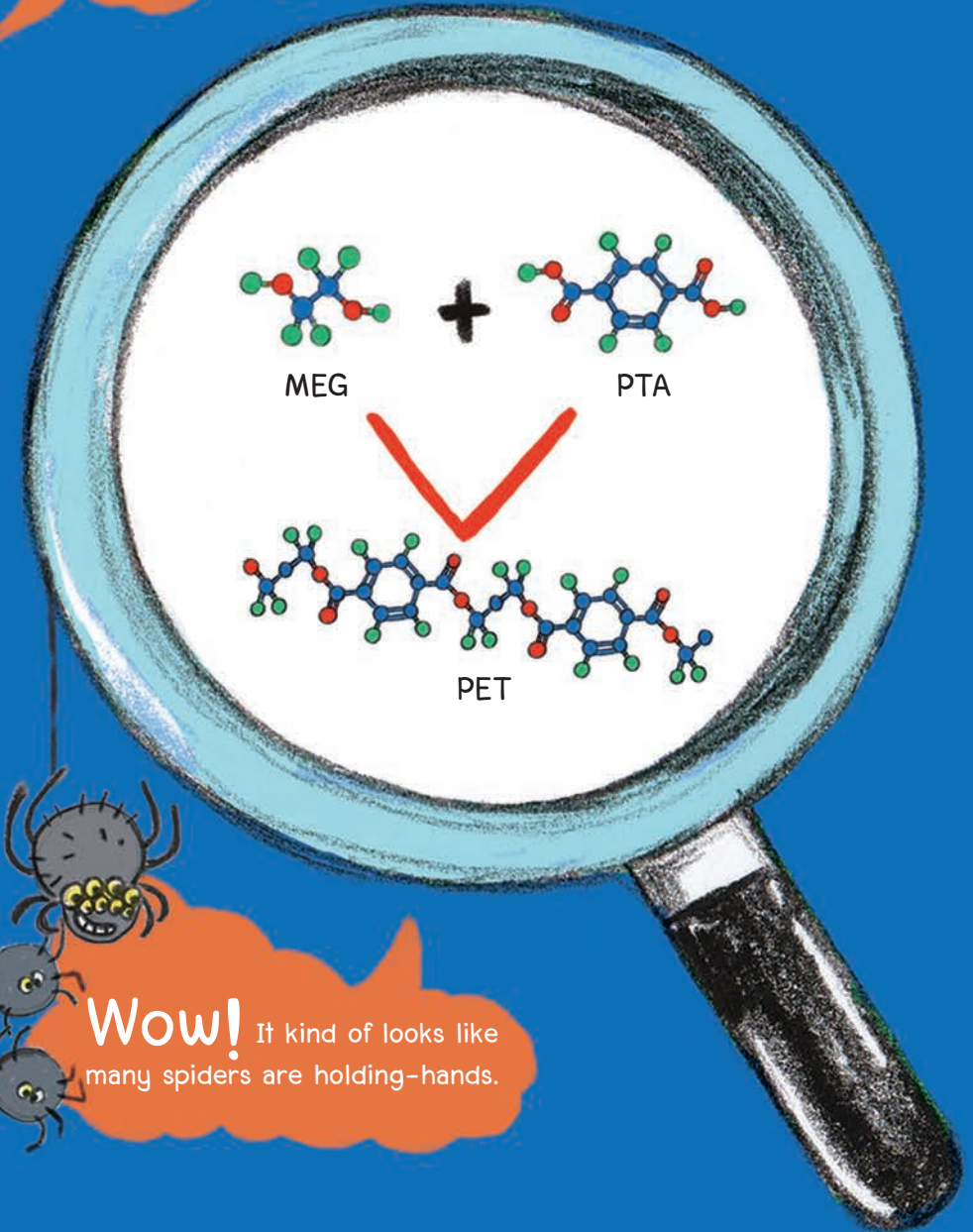


How PET is made



The raw materials for PET come from crude oil and natural gas.
They go through something called polymerization, which is one step in the making of plastic.
PET can be used to produce many products, from packages to fibers for clothes.

Take a look at
my molecular structure



Do you know

about my characteristics and benefits?



- Lightweight
- Colored or colorless
- Clear and transparent

PET (Polyethylene Terephthalate)

Po-ly-e-thy-lene Te-reph-tha-late



Difficult to break

Difficult for Oxygen and Carbon Dioxide to pass through



Easy to be molded into different shapes for packaging

There are other types of plastic besides PET. Here are some examples of

plastics in our daily lives





7.00 Jars of peanut butter and spreads, bottles with oil and milk, and food packages.

From waking up...



8.00 Water bottles



The film or tint in car windows and parts of the interior.

9.00



Coffee cups, soda bottles, and food containers.

15.00 Protective film on mobile phones



PET
is all around
US



12.00



22.00

Bottled water



18.00 Computer screen protectors

20.00 Containers of liquid soap, shampoo, and mouthwash.



...to bedtime.



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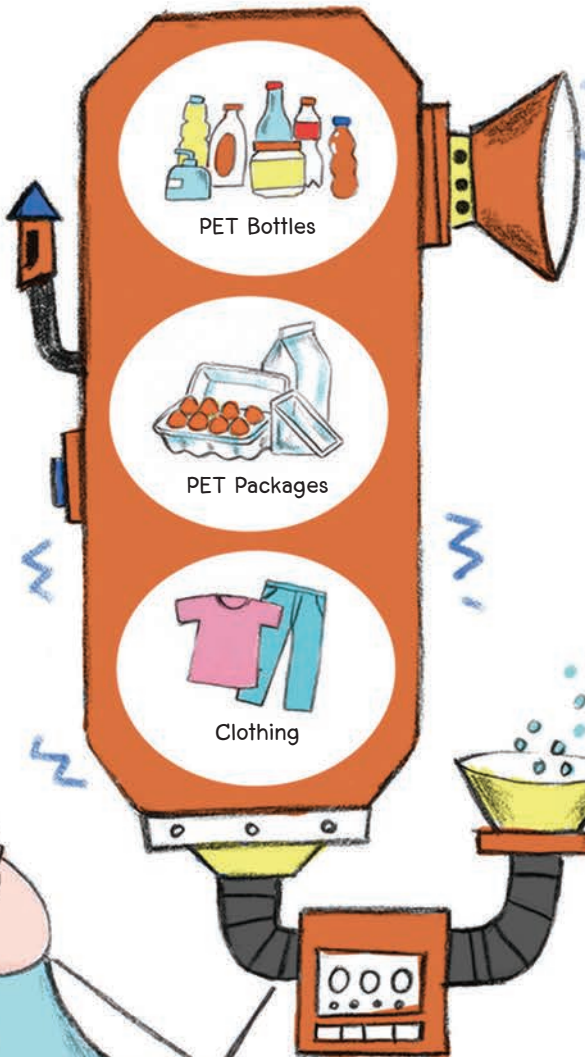
At Indorama Ventures,
they encourage recycling PET bottles.
They recycle used PET bottles to
enhance resource use to benefit society.
This helps preserve the environment and
solves the issue of waste.



Wonderful!



Here are some examples of products made from recycled plastic bottles:



PET Bottles

PET Packages

Clothing

PET is 100% recyclable and can be melted into a range of products.



Consumers



Waste Separation



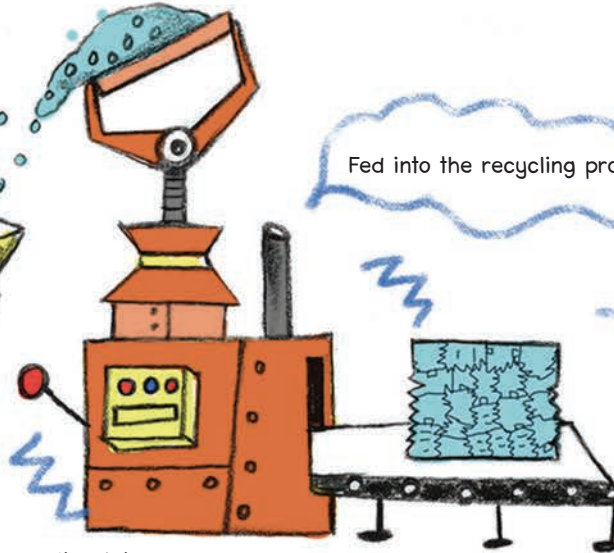
Collected for Recycling



Sorting and Baling



Fed into the recycling process



Indorama Ventures buys post-consumer PET from recycled waste suppliers



PET Plastic Life Cycle

This is so cool!

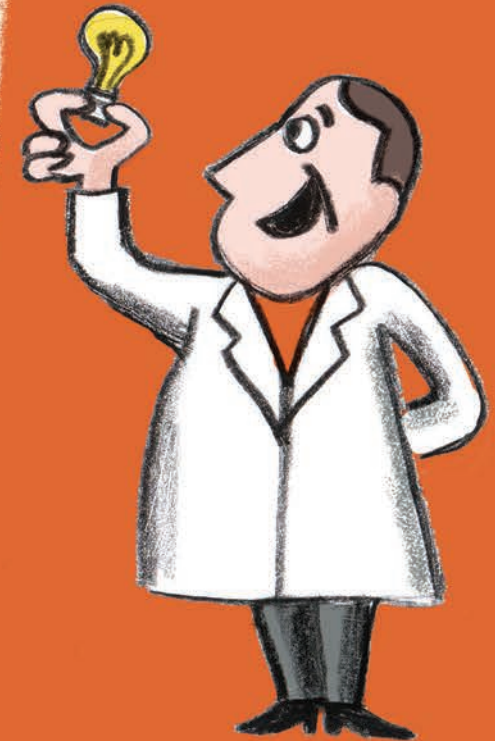
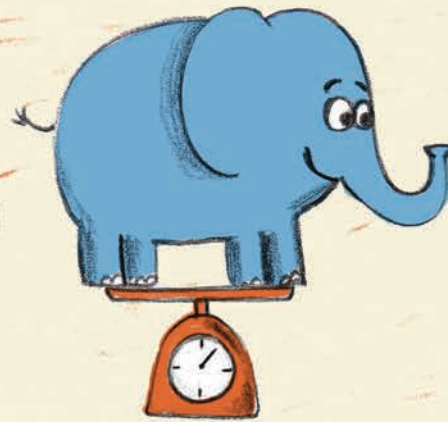
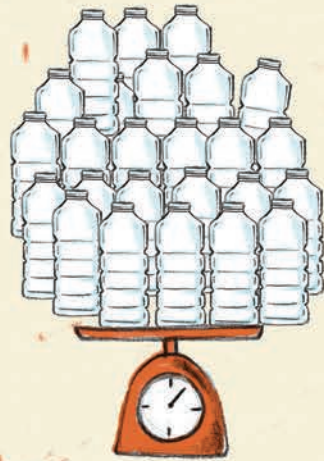


PET and the Environment

Recycling one PET bottle can save the same amount of energy as leaving a 60-watt light bulb on for three hours.



One ton of plastic bottles weighs about the same as a baby elephant.



Recycling one ton of plastic saves 1,000 – 2,000 gallons of gasoline, this is enough to drive a car around the Earth three times!

Do you know what 'recycling' means?



The 3Rs of Waste Management

Reduce

To use less.



Not leaving any food can reduce waste.

Recycling is the process of converting waste materials into raw materials or new products.

For example, PET plastic bottles are crushed and melted transforming them into plastic resin and then made into fibers to produce clothes, carpets, even bottles.

Besides recycling, there are other methods to protect our environment, namely, reducing and reusing.



Recycle Sign

Reuse

To use things again.



Reusing shopping bags.

Recycle

To convert used things into reusable materials.



Products made from recycled PET bottles:



Wow!

Plastic bottles are not wasteful. They can be recycled and used for so many things.



I've just learned that I am so useful. This must be the reason why I am so popular.

Absolutely! That's why we created you.

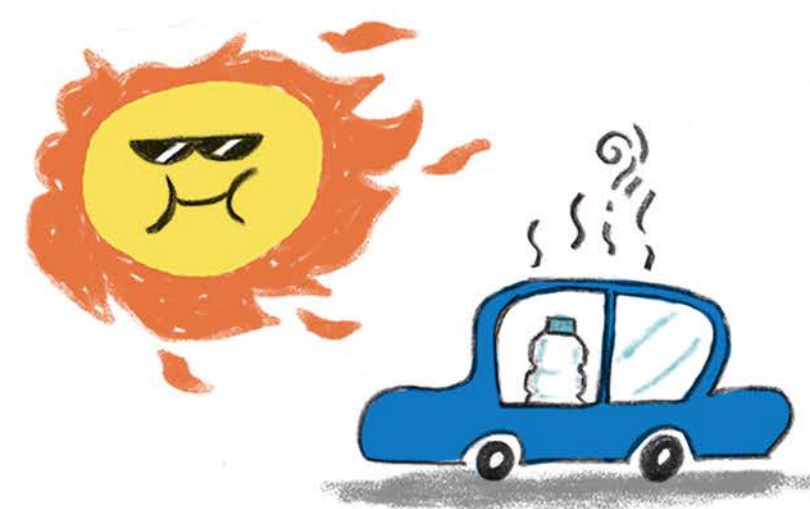


FUN FACTS

Did you know that...?



Drinking bottled water that has been left in a car causes cancer. True or false?



Answer:

False. PET bottles are free from BPA, which is a harmful chemical.

BPA stands for Bisphenol A.

PET is very safe!



True or False ?

We can reuse PET bottles.

True.



Cleaning PET bottles before reusing is necessary to protect against microbes or bacterium.

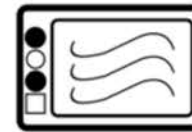


Do not reuse scratched, scraped or broken bottles. They should be recycled instead.

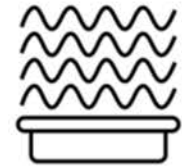
True or False ?

PET containers and trays can be microwaved and frozen.

Microwave



Safe

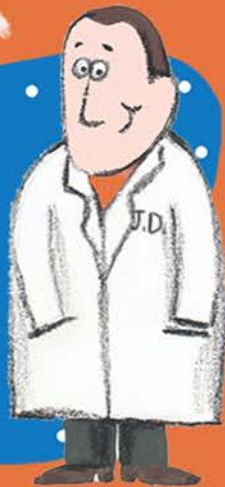


MICROWAVE
OVEN SAFE

True.

PET trays can be used in microwaves and freezers. But, there are certain kinds of PET trays which are non-microwave-safe. You have to look for the symbols shown above. You can also notice the word "Microwavable" on or under the packages. This means the containers are safe for use in microwave ovens.

However, both microwavable and non-microwave-safe PET can be used in freezers.



Reference

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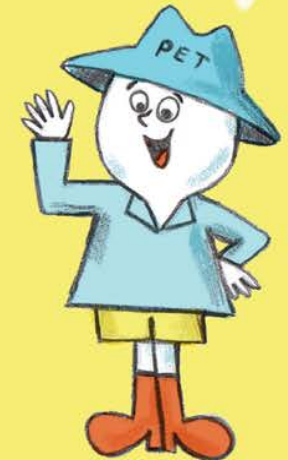
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I'm sure that now you all know
how PET is so useful! It can be recycled again
and again.



Let's separate and
recycle waste from now on!



You can scan this QR CODE to read online
or to share with your friends.



