

WHAT A LOAD OF RUBBISH!

HOW MANY PLASTIC FOOD WRAPPERS DO WE GET THROUGH IN A DAY? ENOUGH TO COVER THE KITCHEN TABLE - MAYBE EVEN YOUR BEDROOM FLOOR?

AND HOW CAN WE REDUCE THE AMOUNT OF PLASTIC WASTE WE THROW AWAY? THERE'S ONLY ONE WAY TO FIND OUT...



we'll learn about...

MATHS & NUMERACY

by measuring the size of different food wrappers and working out their area - and by estimating areas covered by the collected wrappers

you'll need:

- a collection of all the plastic wrappers you use in a day
(maybe try guessing how many will be collected in total)
- rulers or tape measures
- pencils
- calculator

LET'S GET STARTED!

hint

The easiest way to work out the area of a rectangular object is to measure its width and length and multiply them together. The answer is the area in cm^2 !

Once you've spent a day collecting sweet wrappers, crisp packets, fizzy drink labels etc, you're ready to go. First, lay out all the wrappers on the floor – don't leave any gaps between them! Then, work out the area covered by all the wrappers together.

Once you have the final number, multiply by 365 to work out the area covered by all the plastic wrappers you use in a year. Dividing by 10,000 will change your answer from cm^2 to m^2 .

Is it bigger than 7,140 m^2 ? That's the size of a football field!



did you know?

The average room size in UK homes is about 15 m^2 . The biggest room in Buckingham Palace is a whopping **658 m^2** – that's almost **45 times as big**. You'd need a lot of plastic wrappers to cover that much space! (The Queen probably wouldn't be very happy about it either)

TIME TO MEASURE UP

Talk about the size of the area the wrappers cover. What household objects do you think they might cover? Check your ideas by covering them to see! You can use your ruler or tape measure to work out the areas of the objects covered and record them on your worksheet

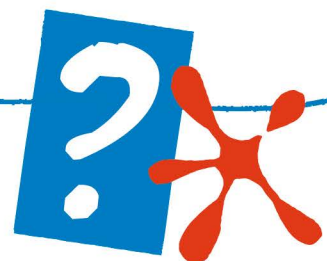
food for thought

How do you feel about the area covered by the wrappers after just one day? Was it more or less than you expected?

What size area would the wrappers cover after one week – or one month?


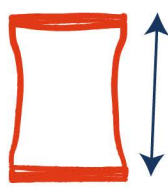
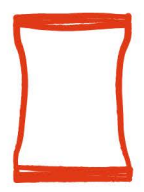
What's the problem with plastic wrappers?

And how can you reduce the amount you use?



WRAP STARS

Use this worksheet to record your measurements and how you think your family might cut down on plastic waste

plastic wrapper	length (L)	width (W)	area (LxW)	how could you reduce how many of these you use?
 CRISP PACKET	 15CM	 12CM	15×12 $=$ <u>180 cm²</u>	MAYBE WE COULD BUY ONE BIG PACKET AND DIVIDE THE CRISPS UP INTO SNACK BOXES