

Slippery ketchup bottle helps zero-waste economy

23rd February, 2017



Have you ever been angry because the tomato ketchup wouldn't come out the bottle? Have you ever squeezed and squeezed the toothpaste tube but the last bit wouldn't come out? Have you ever spent ages trying to scrape the

last bits of jam from the sides of the jar? If the answer to these questions is 'yes,' you may be happy to know that a solution to your problems is coming. Scientists have invented a super-slippery surface that can be put on the inside of bottles, tubes, jars, tins and other containers. The slippery inside means anything will just slide out, like water. Every last drop of things like glue, paint and cosmetics will come out, leaving the container totally empty, and making you happier and richer.

Scientists from the Massachusetts Institute of Technology and the company LiquiGlide wanted to create something that would reduce waste and save us money. The technology's co-inventor, Dr David Smith, said every day, millions of litres of ketchup, sauces, paint, gels and creams get stuck to the sides of containers and are thrown away. He said: "The technology has the potential to significantly reduce waste and be a big part of the zero-waste economy." The LiquiGlide website says: "What the wheel was to transportation, LiquiGlide is to liquids - it changes the way liquids move....We want to revolutionize consumer packaging, reduce waste, and create efficiencies. We are motivated to save lives and improve the world."

Sources: bbc.com / indianewengland.com / liquiglide.com

Writing

Everyone can reduce their waste by half. How can we do this? Discuss.

Chat

Talk about these words from the article.

angry / tomato ketchup / squeezed / ages / jar / solution / surface / containers / glue scientists / waste / inventor / potential / wheel / transportation / efficiencies / improve

True / False

- The article opens with three questions for the reader. T / F
- The article says there is no solution to their problems coming. T / F
- A new surface means things slide out of containers like water. T / F
- The article says the surface will leave people richer and happier. T / F
- The research is from the California Institute of Technology. T / F
- A co-inventor said billions of litres of things are wasted every day. T / F
- A company compared the slippery surface to the invention of the wheel. T / F
- The company said it didn't want to save people's lives. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|---------------------|----------------|
| 1. angry | a. produce |
| 2. ages | b. simply |
| 3. happy | c. wrapping |
| 4. just | d. a long time |
| 5. totally | e. cut |
| 6. create | f. completely |
| 7. reduce | g. possibility |
| 8. potential | h. irritated |
| 9. packaging | i. help |
| 10. improve | j. pleased |

Discussion – Student A

- What things do you waste every day?
- Do you get angry at ketchup bottles?
- How do you squeeze the last bit of toothpaste from the tube?
- How do you get the jam off the side of a jar?
- How happy are you that slippery containers are coming?
- How much money do you think we will save by using this technology?
- What other things can you not get out of tubes, cans, tins and jars?
- What would be a good name for this technology?

Phrase Match

- | | |
|---------------------------------------|-------------------------|
| 1. the tomato ketchup wouldn't | a. lives |
| 2. squeezed and squeezed | b. trying |
| 3. spent ages | c. drop |
| 4. anything will just slide out, | d. of litres of ketchup |
| 5. Every last | e. the toothpaste tube |
| 6. create something that would reduce | f. reduce waste |
| 7. millions | g. come out the bottle |
| 8. the potential to significantly | h. way liquids move |
| 9. it changes the | i. like water |
| 10. save | j. waste |

Discussion – Student B

- What do you think about what you read?
- What could you do to reduce waste?
- What is the zero waste economy?
- What can you do every day to reduce waste?
- Should we wear clothes until they fall apart?
- Should we use electrical goods until they break?
- How will this technology improve the world?
- What questions would you like to ask the inventors?

Spelling

- zueedseq the toothpaste tube
- apesrc the last bits of jam
- a ouilnost to your problems
- a super-repslypi surface
- tubes, jars, tins and other rtsniecaon
- paint and tocmiscse will come out
- reeucd waste
- llsmnioi of litres
- hortwn away
- The technology has the ptliontae
- it changes the way iuulsqd move
- save lives and ovmepir the world

Answers – Synonym Match

1. h	2. d	3. j	4. b	5. f
6. a	7. e	8. g	9. c	10. i

Role Play

Role A – The Wheel

You think the wheel is the world's best invention. Tell the others three reasons why. Tell them why their inventions are not so important. Also, tell the others which is the least important of these (and why): the slippery bottle surface, the computer or chocolate.

Role B – The Slippery Bottle Surface

You think the slippery bottle surface is the world's best invention. Tell the others three reasons why. Tell them why their inventions are not so important. Also, tell the others which is the least important of these (and why): the wheel, the computer or chocolate.

Role C – The Computer

You think the computer is the world's best invention. Tell the others three reasons why. Tell them why their inventions are not so important. Also, tell the others which is the least important of these (and why): the slippery bottle surface, the wheel or chocolate.

Role D – Chocolate

You think chocolate is the world's best invention. Tell the others three reasons why. Tell them why their inventions are not so important. Also, tell the others which is the least important of these (and why): the slippery bottle surface, the computer or the wheel.

Speaking – Slippery

Rank these with your partner. Put the things you are happiest at slipping out of containers at the top. Change partners often and share your rankings.

- | | |
|-----------------|-------------|
| • peanut butter | • ketchup |
| • toothpaste | • glue |
| • hair gel | • paint |
| • honey | • cosmetics |

Answers – True False

a	T	b	F	c	T	d	T	e	F	f	F	g	T	h	F
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Answers to Phrase Match and Spelling are in the text.