

# "Scientists make biodegradable plastic"

## GAP FILL

Plastic has been a blight on the (1) landscape and a deadly threat to wildlife for decades. Environmentalists have issued many (2) issued for us to reduce the amount of plastic we use or switch to biodegradable (3) alternatives. One solution to this problem may be at (4) hand. Scientists have developed a form of biodegradable plastic. This means that the billions of plastic bags, cups, straws and (5) utensils that we dispose of each day could be "compostable" - they could decompose and break down as naturally as organic (6) waste. The scientists are from the University of California, Berkeley. They say they have (7) invented a plastic that could break down within a few weeks, rather than (8) centuries, using just heat and water.

*alternatives*  
*utensils*  
*centuries*  
*landscape*  
*hand*  
*invented*  
*pleas*  
*waste*

The new, biodegradable product involves (9) embedding polyester-eating enzymes into the plastic during the production (10) process. When these enzymes are exposed to heat and water, they eat away at the plastic and (11) reduce it to lactic acid. This provides nutrients for the soil when (12) composted. Professor Ting Xu said up to 98 per cent of the plastic her team made degraded into small molecules. She said: "We are (13) basically saying that we are on the right track. We can solve this continuing problem of (14) single-use plastics." She added: "Look at all the wasted stuff we throw away - clothing, shoes, (15) clothing like cellphones and computers. We are taking things from the earth at a faster (16) rate than we can return them."

*rate*  
*process*  
*basically*  
*embedding*  
*electronics*  
*composted*  
*single*  
*reduce*

## GAP FILL

# "Scientists create human-monkey chimera"

In this (1) rapidly changing world, we are seeing more examples of science fiction becoming science (2) fact. A team of American and Chinese scientists has created the world's first part-human, part-monkey (3) embryo. This fusion of genetic tissue is called a chimera. The scientists say it potentially (4) paves the way for lifesaving medical advances. Bio-scientist Henry Greely explained the importance of this scientific (5) breakthrough. He said: "The long-term goal of this research team is to (6) grow human organs in pigs - kidneys, (7) livers, hearts, etc." He added: "They want to do that to make more human organs for transplants. Tens of thousands of people on a transplant list (8) die every year waiting for a transplant."

The groundbreaking research involved (9) injecting 25 human cells into the embryos of long-(10) tailed macaque monkeys. The human cells developed inside 132 of the embryos. The scientists studied the development of the embryos for 19 days. Many people are (11) disturbed by the research and believe it belongs to the (12) realm of horror movies. Professor Greely said he appreciated that there are many (13) ethical concerns around the creation and use of chimera. He said: "Every time a person gets an organ (14) transplant, the result is an intra-species chimera - an (15) organism made up of cells from two members of the same species....When a human gets a pig heart (16) valve, she becomes an inter-species chimera."

*embryo*

*grow*

*rapidly*

*die*

*breakthrough*

*fact*

*livers*

*paves*

*realm*

*transplant*

*valve*

*injecting*

*disturbed*

*organism*

*tailed*

*ethical*

Answers:

1. A: There's no milk.  
B: I know. **I'm going to** get some from the shop.
2. A: There's no milk.  
B: Really? **I'll** get some from the shop then.
3. A: Why do you need to borrow my suitcase?  
B: **I'm going to** visit my mother in Scotland next month.
4. A: I'm really cold.  
B: **I'll** turn the heating on, then.
5. A: Are you going to John's party tonight?  
B: Yes. Are you going too? **I'll** give you a lift.
6. A: What are your plans after you leave university?  
B: **I'm going to** work in a hospital in Africa. I leave on the 28<sup>th</sup>.
7. (The phone rings)  
A: **I'll** get it!
8. A: Are you ready to order?  
B: I can't decide ... Okay, **I'll** have the steak, please.
9. A: Are you busy tonight? Would you like to have coffee?  
B: Sorry. **I'm going to** go to the library. I've been planning to study all day.
10. A: Why are you carrying a hammer?  
B: **I'm going to** put up some pictures.

Answers:

1. I'm in a café now.
2. Does she play tennis every week?
3. They go to the cinema every Wednesday.
4. Is she a singer?
5. You find the weather here cold.
6. Are they on the bus?
7. Lucy rides her bicycle to work.
8. Why is he in France?
9. I don't play the piano often.
10. It isn't cold today.
11. We are from Portugal.
12. Do we make too much noise at night?
13. Where does Harry study?
14. Is it foggy today?
15. We aren't late.
16. They don't like animals.
17. Where are you?
18. He isn't an accountant.
19. Does the dog eat chicken?
20. She's my sister.

Answers:

1. **Is** John in the garden?
2. **Are** they hungry?
3. **Are** we late?
4. **Are** you tired?
5. **Is** he French?
6. **Is** she a teacher?
7. **Are** Harry and Lucy from London?
8. **Am** I early?
9. **Are** you thirsty?
10. **Is** she on the bus?
11. **Are** we on time?
12. **Is** Pedro from Spain?
13. **Are** they in Tokyo?
14. **Is** Julie at home?
15. **Are** the children at school?
16. **Are** you in a cafe?
17. **Am** I right?
18. **Are** we in the right place?
19. **Is** she German?
20. **Is** he a doctor?