Present Simple – Reading Comprehension

Leather from a lab

Leather **are/is** a hugely popular material for a range of products: shoes, jackets, bags, wallets—the list **goes/go** on. But this popularity **comes/come** at a price. The global leather industry **kill/kills** over a billion animals every year. This **have/has** caused many to ask the question: **Am/Is** it possible to meet the global demand of leather but not **does/do** any harm to animals? A process called biofabrication may be the answer.

Biofabrication is not new; it is already commonly used in medicine. Biofabrication techniques **are/is** used to grow body parts like ears, skin, and bones for transplants.[1] But it can also be used to **makes/make** other products, such as leather. Biofabricated leather has many advantages. Scientists will be able to make it with whatever qualities they **wants/want**, such as extra softness, greater strength, or even different colors and patterns.

But how exactly **do/does** biofabrication work? To grow leather, scientists begin by taking some cells from an animal, not hurting the animal in any way. They then isolate the cells and **grow/grows** them in a lab. This process takes millions of cells and expands them into billions. Next, the scientists take the cells and **spread/spreads** them out to form thin sheets. These thin sheets are then layered to combine into thicker sheets. After that, the scientists can tan the hide.[2] Anyone can then dye[3] and finish the leather and design it in any way they like—into bags, watches, or shoes.

Andras Forgacs **supports/support** biofabrication. He says it may even be a "natural evolution[4] of manufacturing for mankind." We **are going/will** be able to make the products we need in a more efficient, responsible, and creative way. And biofabrication is not just about leather—it's possible the technique could also be used to grow meat. While this may sound crazy, Forgacs certainly doesn't think so. "What's crazy," he says, "is what we do today.

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[1] **transplant:** *n.* an operation in which a body part is replaced

[2] **tan the hide:** *phrase* to turn animal skin into leather

[3] **dye:** *v.* to change the color of something using special liquid

[4] **evolution:** *n.* a process of gradual, natural change over time

READING Leather from a lab

1 How many leather products do you own? Discuss with a partner.

2 Read the first paragraph of the article. What is the problem with leather?

Understanding details

3 ▶ 7.11 Read the article. Circle **T** for true, **F** for false or **NG** for not given.

1	Many animals are killed to make leather.	T	F	NG
2	Demand for leather is increasing.	T	F	NG
3	Biofabrication is already used in medicine.	T	F	NG
4	Animals feel pain when scientists take their cells.	T	F	NG
5	Biofabrication could be used to grow meat.	T	F	NG

Understanding process

4 Look at the diagram. Number the sentences 1–8.

a Scientists grow the cells in a lab. ____

b Scientists can tan the hide. ____

c Thicker sheets are formed. ____

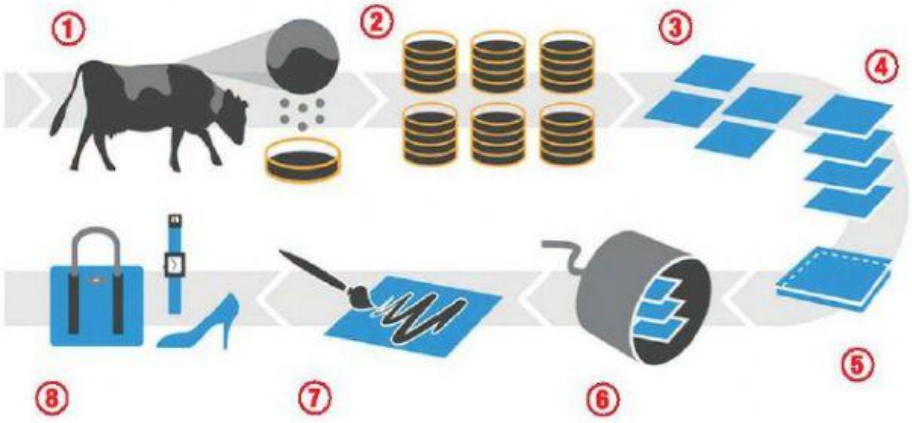
d Scientists spread the cells and form thin sheets. ____

e Scientists take cells from an animal. ____

f The thin sheets are layered. ____

g The leather can be dyed and finished. ____

h The leather is made into different products. ____



Understanding vocabulary

5 Match the **bold** words from the article with their definitions.

1 range	**a** a room where scientific experiments take place
2 cell	**b** able to do something well without wasting time or energy
3 lab	**c** an extremely small part of an animal or plant
4 layer	**d** a number of different things
5 efficient	**e** to arrange one on top of another

6 Would you wear biofabricated leather? Would you eat biofabricated meat? Discuss with a partner.