

Vocabulary: Innovation 词汇: 创造

Here's a simple challenge: name a famous inventor. Perhaps Renaissance **polymath** Leonardo da Vinci **springs to mind**. Or the **pioneer** of the telephone, Alexander Graham Bell. But you might be **hard-pressed** to name many female inventors, even though women are behind some of the most widely used technologies in the modern world.

For example, **where would we be without** the **windscreen wiper**? Back on a freezing winter's day in 1902, Mary Anderson was travelling by tram through New York city. Snow was falling, forcing the driver to stop repeatedly and get out to clear it. Each time the door opened, Mary suffered a gust of **sub-zero** air. She had a **brainwave**: why not make some kind of a rubber blade that could be operated from inside the vehicle? And that's exactly what she did.

Let's step in from freezing New York for our next invention. The **dishwasher** dates back even earlier to the 19th Century, and to the dinner parties **thrown** by a lady called Josephine Cochrane. As a frequent host, she wanted a machine that could wash dishes faster than people. Her response was to develop what was to become the first commercially successful dishwasher. Interestingly, innovation was **in her blood**: her grandfather had invented the steamboat.

Need something to do while the dishwasher is **whirring** away? How about a round of Monopoly? One of the most popular board games around, the rules were first drawn up by a lady called Elizabeth Magie, and **patented** in 1904. Her intention was to create a game to highlight what she saw as the **pitfalls** of capitalism. It was originally called The Landlord's Game.

To an altogether different kind of innovation: Kevlar is the lightweight fibre used in **bulletproof vests**. The material is used by millions every day and has saved countless lives. The super tough fabric is also used in objects ranging from gloves to aeroplanes to **wind turbines**. Incredibly, its strength-to-weight ratio is five times higher than steel. Again, it was invented by a woman, the American chemist Stephanie Kwolek, in 1964.

Finally, one of the most important inventions of the 20th Century must surely be the computer programme. The world of programming is **notoriously** unbalanced in terms of **gender**. Men vastly **outnumber** women, and take home around 30% more pay than their female counterparts on average. But back in the 1940s and 50s, women were at the forefront of this new field. Grace Hopper is credited with inventing the first compiler in 1952, which serves as the bridge between code and the **binary** ones and zeros understood by computers.

词汇表

polymath	博学者，博学的人
spring to mind	突然呈现在脑海中
pioneer	先锋
hard-pressed	（由于缺少时间）面临困难的
where would we be without...	假如没有...我们将会是怎样的？
windscreen wiper	雨刷器
sub-zero	温度在零度以下的
brainwave	（突发的）灵感，妙计
dishwasher	洗碗机
throw (a party)	举办（聚会）
in someone's blood	在某人的血液中，在骨子里
whirr	（洗衣机）发出嗡嗡声
patent	注册专利权
pitfall	陷阱
bulletproof vest	防弹背心
wind turbine	风力发电机
notoriously	出了名地（负面），声名狼藉地
gender	性别
outnumber	在数量上压倒
binary	二进位制

测验与练习

1. 阅读课文并回答问题。

1. How did a cold day cause the windscreen wiper to be invented?
2. Why did Cochrane invent the dishwasher?
3. Which word expresses the relationship between two amounts?
4. Which word refers to something lone with a sharp edge?
5. Which industry used to employ comparatively more women in the past than today?

2. 请你在不参考课文的情况下完成下列练习。选择一个意思合适的单词填入句子的空格处。

1. I've just had a _____. Why don't we invent a machine that answers questions in Take Away English?

brainwave	innovation	invention	idea
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2. Where would we be without you, Matt? Your quick thinking _____ our company.

hard-pressed	whirred	ruined	saved
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3. There are a number of _____ to consider when starting a business. Do your research so you don't face these problems.

polymaths	pitfalls	patents	opportunities
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4. What's that whirring sound? It's just the _____.

drill	television	washing machine	cat
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5. This area is _____ for violence. Take care on the streets.

notorious	pitfall	in the blood	outnumbered
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答案

1. 阅读课文并回答问题。

1. How did a cold day cause the windscreen wiper to be invented?

Every time the driver opened the door, freezing air came inside. Mary Anderson thought there had to be a better way of cleaning the window from inside – which exactly what her invention does.

2. Why did Cochrane invent the dishwasher?

Josephine Cochrane wanted a machine that could wash dishes quicker than humans could, so she could continue to host large parties for her guests.

3. Which word expresses the relationship between two amounts?

Ratio

4. Which word refers to something lone with a sharp edge?

Blade.

5. Which industry used to employ comparatively more women in the past than today?

Computing. Women were at the forefront in the 1940s and 50s, but now the field is dominated by men.

2. 请你在不参考课文的情况下完成下列练习。选择一个意思合适的单词填入句子的空格处。

1. I've just had a **brainwave**. Why don't we invent a machine that answers questions in Take Away English?

2. Where would we be without you, Matt? Your quick thinking **saved** our company.

3. There are a number of **pitfalls** to consider when starting a business. Do your research so you don't face these problems.

4. What's that whirring sound? It's just the **washing machine**.

5. This area is **notorious** for violence. Take care on the streets.