BBC LEARNING ENGLISH Take Away English 随身英语 Our eyes to the Universe 人类观测宇宙的"眼睛"

BBC LEARNING ENGLISH

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Vocabulary: space 太空

The Space **Telescope** Hubble has changed the way we look at the universe. In its 25 years of activity it has captured over a million images of **deep space**.

The Hubble **drifts** 370 miles above the Earth, in a much better position to observe the **cosmos** than ground-based telescopes. It avoids the distortions of the **atmosphere**, and takes extremely **high-resolution** images with very little background light.



Hubble's orbit is 370 miles above the Earth

NASA Administrator Charlie Bolden says: "Even

the most optimistic person to whom you could have spoken back in 1990 couldn't have predicted the degree to which Hubble would rewrite our **astrophysics** and **planetary** science textbooks."

Before the telescope was launched, there were doubts about the age of the universe. Some said it was 10 billion years old and others thought 20 billion. Now, thanks to Hubble's observation of stars, we know it's 13.8 billion years old. The telescope has also helped to reveal the accelerating **expansion** of the universe and provided evidence of the existence of massive **black** holes at the centre of **galaxies**.

But this hasn't been an easy journey. Named after the US **astronomer** Edwin Hubble, it left the Earth's surface on the back of the **space shuttle** Discovery. But the initial images were **fuzzy** and crucial repairs were made to its mirror in 1993.

Now Hubble is **probing** objects up to 50 times **fainter** than before. Its aim is to reach as far back as possible, when the first stars were forming, just a few hundred million years after the **Big Bang**.

Hubble has lasted ten years longer than expected. It will be succeeded by the James Webb Space Telescope, which is due for launch in 2018. 词汇表请参看答案与词汇部分

Quiz 测验

阅读短文并回答问题。

- I. How many pictures has the Hubble Space Telescope taken?
- 2. Why is the space telescope better than ones on Earth?
- 3. How old is the universe?
- 4. What's the goal of the Hubble Space Telescope now?
- 5. Which verb in the article means to follow after a previous person or thing in a certain position?

Exercise 练习

请你在不参考课文的情况下完成下列练习。从每个表格中选择一个意思合适的单词填入 句子的空格处。

I. The Earth is just a dot at the edge of a very big _____.

black hole galaxy Big Bang object		galaxy	Big Bang	object	
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2. My teacher asked me to _____ my essay. He said I got the topic wrong.

observe predict repair rewrite

3. My camera is very expensive. It takes _____ pictures.

fuzzy deep space high-resolution fainter

4. You should buy a new computer. These machines are ______ to last just a few years.

probed	launched	predicted	expected

5. Hi, I'm Elvis. I was named _____ my parents' favourite singer.

to with after equal

Answers and Glossary 答案与词汇

Quiz 小测验

- I. How many pictures has the Hubble Space Telescope taken? Over a million.
- 2. Why is the space telescope better than ones on Earth? Because it avoids the distortions of the atmosphere when taking pictures.
- 3. How old is the universe? It's 13.8 billion years old.
- 4. What's the goal of the Hubble Space Telescope now? To probe objects formed just a few hundred million years after the Big Bang.
- 5. Which verb in the article means to follow after a previous person or thing in a certain position? **To succeed.**

Exercise 练习

- I. The Earth is just a dot at the edge of a very big galaxy.
- 2. My teacher asked me to **rewrite** my essay. He said I got the topic wrong.
- 3. My camera is very expensive. It takes high-resolution pictures.
- 4. You should buy a new computer. These machines are **expected** to last just a few years.
- 5. Hi, I'm Elvis. I was named **after** my parents' favourite singer.

Glossary 词汇表

telescope	望远镜
deep space	深空,外层空间
to drift	漂移
cosmos	宇宙
atmosphere	大气
high-resolution	高分辨率的
astrophysics	天体物理学
planetary	与行星有关的
expansion	扩张
black hole	黑洞
galaxy	星系
astronomer	天文学家
space shuttle	航天飞机
fuzzy	模糊的
probe	(动词)探测
faint	模糊的,暗淡的
Big Bang	宇宙大爆炸