

www.**Breaking News English**.com

Ready-to-use ESL / EFL Lessons

"1,000 IDEAS & ACTIVITIES FOR LANGUAGE TEACHERS"

The Breaking News English.com Resource Book

<http://www.breakingnewsenglish.com/book.html>

NASA telescope to look for other Earths

<http://www.breakingnewsenglish.com/0903/090308-space.html>

Contents

The Article	2
Warm ups	3
Before Reading / Listening	4
While Reading / Listening	5
Listening Gap Fill	6
After Reading / Listening	7
Student Survey	8
Discussion	9
Language Work	10
Writing	11
Homework	12
Answers	13

8th March, 2009

THE ARTICLE

NASA has successfully launched a rocket carrying a planet-hunting telescope. The powerful Kepler telescope will search for planets similar to the Earth. Scientists believe there are good chances of finding a planet like ours somewhere out there in the galaxy. There are billions and billions of stars in the heavens. If one planet is the right distance from one of these stars, then conditions might be right to support life. The planet's atmosphere should neither be too hot nor too cold. The planet would also need water. The telescope is named after the German 17th-Century astronomer Johannes Kepler. It will spend more than three years looking for dark specks against the brightness of a hundred-thousand stars. These specks could be Earth-like planets.

The manager of the \$600-million project Jim Fanson said: "We have a feeling like we're about to set sail across an ocean to discover a new world." NASA's space science boss Ed Weiler agreed that the mission was a "historical" landmark in space exploration. However, he couldn't say whether or not the telescope would find another Earth. "It very possibly could tell us that Earths are very, very common...or that Earths are really, really, really rare - perhaps we're the only Earth," he said. He told reporters how important Kepler's journey was, saying: "It really attacks some basic human questions that have been asked since that first man or woman looked up at the sky and asked, 'Are we alone?'"

WARM-UPS

1. SPACE: Walk around the class and talk to other students about space. Change partners often. After you finish, sit with your partner(s) and share your findings.

2. CHAT: In pairs / groups, decide which of these topics or words from the article are most interesting and which are most boring.

NASA / rockets / telescopes / Earth / galaxies / atmosphere / support life / brightness / discovering new worlds / historical landmarks / space exploration / basic questions

Have a chat about the topics you liked. Change topics and partners frequently.

3. EXPLORATION: Write about the benefits of these kinds of exploration. Talk about what you wrote with your partner(s). Change partners and share what you found out.

Exploration	Benefits
Space	
The brain	
Underwater	
Oil and gas	
Self	
Scientific	

4. ALIENS: Students A **strongly** believe aliens exist; Students B **strongly** believe they don't. Change partners again and talk about your conversations.

5. WELCOME TO EARTH: What would you show an alien visitor to Earth? Complete the table with your partner(s). Change partners and talk about what you wrote.

A famous sight _____

An invention _____

A piece of art _____

A person _____

A movie _____

A city _____

A sport _____

Something you own _____

6. NASA: Spend one minute writing down all of the different words you associate with the space agency 'NASA'. Share your words with your partner(s) and talk about them. Together, put the words into different categories.

BEFORE READING / LISTENING

1. TRUE / FALSE: Look at the article's headline and guess whether these sentences are true (T) or false (F):

- a. NASA will soon launch a telescope that will look for planets like ours. T / F
- b. Scientists believe the chances of finding an Earth-like planet are good. T / F
- c. A German astronomer called Kepler invented the telescope. T / F
- d. The telescope will look at stars for a hundred thousand years. T / F
- e. The project manager likened the mission to voyaging to new worlds. T / F
- f. A NASA boss said he would build a landmark on any new planets. T / F
- g. The boss said it's possible we may be the only Earth in the galaxy. T / F
- h. The boss said a basic question for the human race is 'Are we lonely?' T / F

2. SYNONYM MATCH: Match the following synonyms from the article:

- | | |
|-------------|----------------|
| 1. search | a. require |
| 2. finding | b. voyage |
| 3. support | c. scarce |
| 4. need | d. sustain |
| 5. specks | e. look for |
| 6. set sail | f. fundamental |
| 7. landmark | g. embark |
| 8. rare | h. locating |
| 9. journey | i. milestone |
| 10. basic | j. spots |

3. PHRASE MATCH: Match the following phrases from the article (sometimes more than one combination is possible):

- | | |
|--------------------------------------------------|----------------------|
| 1. NASA has successfully launched | a. hot nor too cold |
| 2. Scientists believe there are good chances of | b. only Earth |
| 3. There are billions and billions of stars in | c. finding a planet |
| 4. The planet's atmosphere should neither be too | d. rare |
| 5. looking for dark specks against | e. space exploration |
| 6. set sail | f. a rocket |
| 7. a "historical" landmark in | g. human questions |
| 8. Earths are really, really, really | h. the heavens |
| 9. perhaps we're the | i. the brightness |
| 10. It really attacks some basic | j. across an ocean |

WHILE READING / LISTENING

GAP FILL: Put the words into the gaps in the text.

NASA has successfully _____ a rocket carrying a planet-hunting telescope. The powerful Kepler telescope will search for planets _____ to the Earth. Scientists believe there are good _____ of finding a planet like ours somewhere out there in the galaxy. There are billions and billions of stars in the _____. If one planet is the right _____ from one of these stars, then conditions might be right to _____ life. The planet's atmosphere should neither be too hot nor too cold. The planet would also need water. The telescope is _____ after the German 17th-Century astronomer Johannes Kepler. It will spend more than three years looking for dark specks against the _____ of a hundred-thousand stars. These specks could be Earth-like planets.

named
heavens
similar
support
launched
chances
brightness
distance

The manager of the \$600-million project Jim Fanson said: "We have a feeling like we're about to _____ sail across an ocean to discover a new world." NASA's space science boss Ed Weiler agreed that the mission was a "historical" _____ in space exploration. However, he couldn't say _____ or not the telescope would find another Earth. "It very possibly could tell us that Earths are very, very _____...or that Earths are really, really, really _____ - perhaps we're the only Earth," he said. He told reporters how important Kepler's _____ was, saying: "It really attacks some basic human _____ that have been asked since that first man or woman looked up at the sky and asked, 'Are we _____?'"

landmark
questions
set
rare
journey
whether
common
alone

LISTENING: Listen and fill in the spaces.

NASA has successfully launched a rocket carrying _____ telescope. The powerful Kepler telescope will search for planets _____. Scientists believe there are good chances of finding a planet like ours somewhere _____. There are billions and billions of stars in the heavens. If one planet is the right distance from one of these stars, then conditions might be _____. The planet's atmosphere should neither be too hot nor too cold. The planet would also need water. The telescope _____ German 17th-Century astronomer Johannes Kepler. It will spend more than three years looking for dark specks _____ of a hundred-thousand stars. These specks could be Earth-like planets.

The manager of _____ Jim Fanson said: "We have a feeling like we're about to set sail across an ocean _____." NASA's space science boss Ed Weiler agreed that the mission was a "historical" landmark in space exploration. However, he couldn't _____ the telescope would find another Earth. "It very possibly could tell us that Earths are very, very common...or that Earths are really, really, really rare - _____ Earth," he said. He told reporters how important Kepler's journey was, saying: "It really attacks some _____ that have been asked since that first man or woman _____ asked, 'Are we alone?'"

AFTER READING / LISTENING

1. WORD SEARCH: Look in your dictionaries / computer to find collocates, other meanings, information, synonyms ... for the words 'planet' and 'Earth'.

planet	Earth

- Share your findings with your partners.
- Make questions using the words you found.
- Ask your partner / group your questions.

2. ARTICLE QUESTIONS: Look back at the article and write down some questions you would like to ask the class about the text.

- Share your questions with other classmates / groups.
- Ask your partner / group your questions.

3. GAP FILL: In pairs / groups, compare your answers to this exercise. Check your answers. Talk about the words from the activity. Were they new, interesting, worth learning...?

4. VOCABULARY: Circle any words you do not understand. In groups, pool unknown words and use dictionaries to find their meanings.

5. TEST EACH OTHER: Look at the words below. With your partner, try to recall how they were used in the text:

<ul style="list-style-type: none">• successfully• similar• chances• distance• named• specks	<ul style="list-style-type: none">• feeling• agreed• whether• rare• basic• sky
--------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------

STUDENT ALIEN PLANET SURVEY

Write five GOOD questions about alien planets in the table. Do this in pairs. Each student must write the questions on his / her own paper.

When you have finished, interview other students. Write down their answers.

	STUDENT 1 _____	STUDENT 2 _____	STUDENT 3 _____
Q.1.			
Q.2.			
Q.3.			
Q.4.			
Q.5.			

- Now return to your original partner and share and talk about what you found out. Change partners often.
- Make mini-presentations to other groups on your findings.

ALIEN PLANETS DISCUSSION

STUDENT A's QUESTIONS (Do not show these to student B)

- a) What did you think when you read the headline?
- b) What springs to mind when you hear the word 'alien'?
- c) Do you think governments should spend money on space exploration?
- d) Do you think there is life on other planets?
- e) What should scientists do if they find signs of life?
- f) What three questions would you ask an alien?
- g) Do you think there'd be any problems if aliens came to Earth?
- h) What do you think the chances are of finding a planet similar to Earth?
- i) What do you think the chances are of aliens looking like us?
- j) If no planets are found, is the telescope a waste of money?

NASA telescope to look for other Earths – 8th March, 2009
More free lessons at www.BreakingNewsEnglish.com

ALIEN PLANETS DISCUSSION

STUDENT B's QUESTIONS (Do not show these to student A)

- a) Did you like reading this article?
- b) What's more important, this \$600-million telescope or feeding the poor?
- c) Have you ever set sail on a great journey?
- d) What kind of people do you think space scientists are?
- e) What other historical landmarks in space exploration do you know of?
- f) How would we change if the telescope found hundreds of Earths?
- g) What's the most important journey you've been on?
- h) What questions do you ask when you look up at the sky?
- i) Do you care whether or not we are alone?
- j) What questions would you like to ask NASA's space science boss Ed Weiler?

NASA telescope to look for other Earths – 8th March, 2009
More free lessons at www.BreakingNewsEnglish.com - Copyright 2009

LANGUAGE

NASA has successfully launched a rocket (1) ____ a planet-hunting telescope. The powerful Kepler telescope will search for planets similar to the Earth. Scientists believe there are good (2) ____ of finding a planet like ours somewhere out there in the galaxy. There are billions and billions of stars in the heavens. If one planet is the right distance (3) ____ one of these stars, then conditions might be right to support (4) _____. The planet's atmosphere should neither be too hot nor too cold. The planet would also need water. The telescope is named (5) ____ the German 17th-Century astronomer Johannes Kepler. It will spend more than three years looking for dark specks against the (6) ____ of a hundred-thousand stars. These specks could be Earth-like planets.

The manager (7) ____ the \$600-million project Jim Fanson said: "We have a feeling like we're about to set sail across an ocean to discover a new world." NASA's space science boss Ed Weiler (8) ____ that the mission was a "historical" landmark in space exploration. However, he couldn't say whether or not the telescope would find (9) ____ Earth. "It very possibly could tell us that Earths are very, very (10) ____...or that Earths are really, really, really rare - perhaps we're the only Earth," he said. He told reporters how important Kepler's journey was, saying: "It really attacks some (11) ____ human questions that have been asked since that first man or woman looked up at the sky and asked, 'Are we (12) ____?'"

Put the correct words from the table below in the above article.

- | | | | | |
|-----|--------------|---------------|---------------|-----------------|
| 1. | (a) carried | (b) carrier | (c) carries | (d) carrying |
| 2. | (a) chance | (b) chanced | (c) chances | (d) chancing |
| 3. | (a) over | (b) from | (c) for | (d) with |
| 4. | (a) life | (b) alive | (c) lively | (d) living |
| 5. | (a) before | (b) above | (c) after | (d) under |
| 6. | (a) bright | (b) brighter | (c) brightly | (d) brightness |
| 7. | (a) to | (b) of | (c) by | (d) as |
| 8. | (a) agreed | (b) agreeing | (c) agree | (d) agrees |
| 9. | (a) other | (b) another | (c) the other | (d) others |
| 10. | (a) commoner | (b) commons | (c) common | (d) commonality |
| 11. | (a) basic | (b) basically | (c) basics | (d) base |
| 12. | (a) lone | (b) loner | (c) loneliest | (d) alone |

HOMEWORK

1. VOCABULARY EXTENSION: Choose several of the words from the text. Use a dictionary or Google's search field (or another search engine) to build up more associations / collocations of each word.

2. INTERNET: Search the Internet and find out more about the Kepler telescope and its mission. Share what you discover with your partner(s) in the next lesson.

3. LANDMARKS: Make a poster about the five most important landmarks in space exploration. How have they changed life on Earth? Show your work to your classmates in the next lesson. Did you all have similar things?

4. WORTH IT?: Write a magazine article about whether or not it is worth it to spend money on space exploration. Include imaginary interviews with NASA's space science boss Ed Weiler and some poor people who have little money for food, healthcare and education.

Read what you wrote to your classmates in the next lesson. Write down any new words and expressions you hear from your partner(s).

5. LETTER: Write a letter to NASA's space science boss Ed Weiler. Ask him three questions about the Kepler mission. Give him three pieces of advice on what he should do if he finds aliens. Read your letter to your partner(s) in your next lesson. Your partner(s) will answer your questions.

ANSWERS

TRUE / FALSE:

- a. F b. T c. F d. F e. T f. F g. T h. F

SYNONYM MATCH:

- | | |
|-------------|----------------|
| 1. search | a. look for |
| 2. finding | b. locating |
| 3. support | c. sustain |
| 4. need | d. require |
| 5. specks | e. spots |
| 6. set sail | f. embark |
| 7. landmark | g. milestone |
| 8. rare | h. scarce |
| 9. journey | i. voyage |
| 10. basic | j. fundamental |

PHRASE MATCH:

- | | |
|--------------------------------------------------|----------------------|
| 1. NASA has successfully launched | a. a rocket |
| 2. Scientists believe there are good chances of | b. finding a planet |
| 3. There are billions and billions of stars in | c. the heavens |
| 4. The planet's atmosphere should neither be too | d. hot nor too cold |
| 5. looking for dark specks against | e. the brightness |
| 6. set sail | f. across an ocean |
| 7. a "historical" landmark in | g. space exploration |
| 8. Earths are really, really, really | h. rare |
| 9. perhaps we're the | i. only Earth |
| 10. It really attacks some basic | j. human questions |

GAP FILL:

NASA telescope to look for other Earths

NASA has successfully **launched** a rocket carrying a planet-hunting telescope. The powerful Kepler telescope will search for planets **similar** to the Earth. Scientists believe there are good **chances** of finding a planet like ours somewhere out there in the galaxy. There are billions and billions of stars in the **heavens**. If one planet is the right **distance** from one of these stars, then conditions might be right to **support** life. The planet's atmosphere should neither be too hot nor too cold. The planet would also need water. The telescope is **named** after the German 17th-Century astronomer Johannes Kepler. It will spend more than three years looking for dark specks against the **brightness** of a hundred-thousand stars. These specks could be Earth-like planets.

The manager of the \$600-million project Jim Fanson said: "We have a feeling like we're about to **set** sail across an ocean to discover a new world." NASA's space science boss Ed Weiler agreed that the mission was a "historical" **landmark** in space exploration. However, he couldn't say **whether** or not the telescope would find another Earth. "It very possibly could tell us that Earths are very, very **common**...or that Earths are really, really, really **rare** - perhaps we're the only Earth," he said. He told reporters how important Kepler's **journey** was, saying: "It really attacks some basic human **questions** that have been asked since that first man or woman looked up at the sky and asked, 'Are we **alone**?'"

LANGUAGE WORK

- 1 - d 2 - c 3 - b 4 - a 5 - c 6 - d 7 - b 8 - a 9 - b 10 - c 11 - a 12 - d