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Ready-to-Use English Lessons by Sean Banville

Level 3 – 17th November, 2022

Our Sun will die in 10 billion years from now

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https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Contents

Please try Levels 0, 1 and 2 (they are easier).

THE ARTICLE

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Scientists have worked out when our Sun will die. It won't be any time soon. It will be in 10 billion years. The scientists are from the University of Manchester in the UK. They predict that in about 5 billion years from now, the Sun will turn into a "red giant". This is the scientific name given to a star at the end of its life. When our Sun becomes a red giant, its centre will shrink. Its outer layers will expand as far as Mars. This means Earth will be burnt and disappear. After our Sun turns into a red giant, it will become a planetary nebula. This is a bubble of gas and space dust. The scientists say no humans will be on Earth when the Sun dies out. Humans will disappear in around one billion years from now.

The Sun is still quite young in space years. It is just 4.6 billion years old. This means it is only around one third into its lifespan. Professor Albert Zijlstra, a scientist from the University of Manchester, explained what happens at the end of a star's life. He said: "When a star dies, it ejects a mass of gas and dust into space....This reveals the star's core. By this point in the star's life, it is running out of fuel." He said it eventually turns off and dies. Professor Zijlstra was happy that modern science can calculate the age of stars and what will happen to them. He said we can measure the presence of stars in distant galaxies, and "we even have found out what the Sun will do when it dies".

Sources: https://www.**sciencealert.com**/scientists-figured-out-when-and-how-our-sun-will-die-and-it-will-be-epic
https://www.**ndtv.com**/world-news/how-and-when-will-the-sun-die-researchers-have-an-answer-3513891
https://www.**inverse.com**/science/when-will-the-sun-die

WARM-UPS

1. THE SUN: Students walk around the class and talk to other students about the Sun. Change partners often and share your findings.

2. CHAT: In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

> scientists / our Sun / soon / 5 billion years from now / giant / Mars / bubble / gas / space / professor / dust / modern science / the age of stars / distant galaxies

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

3. PREPARATIONS: Students A **strongly** believe we should start preparing now for the end of humanity; Students B **strongly** believe that's silly. Change partners again and talk about your conversations.

4. END OF THE WORLD: What would you do if the Sun was going to end Earth next week? Complete this table with your partner(s). Change partners often and share what you wrote.

About...	What?	Why?
Family		
Friends		
Food		
Travel		
Games		
Hobbies		

5. BILLION: Spend one minute writing down all of the different words you associate with the word "billion". Share your words with your partner(s) and talk about them. Together, put the words into different categories.

6. SPACE: Rank these with your partner. Put the most interesting things about space at the top. Change partners often and share your rankings.

- The Sun
- The Moon
- Mars
- Black holes
- Asteroids
- Space dust
- Jupiter
- Distant galaxies

VOCABULARY MATCHING

Paragraph 1

1.	worked out	a.	Become or make larger.
2.	predict	b.	Dry powder consisting of tiny bits of earth or waste matter lying on the ground.
3.	scientific	c.	Found the answer to something.
4.	shrink	d.	Say or guess a something will happen in the future.
5.	expand	e.	Become or make smaller in size or amount.
6.	bubble	f.	A thin ball of liquid with air or another gas.
7.	dust	g.	About science.

Paragraph 2

8.	lifespan	h.	Material such as coal, gas, or oil that is burned to produce heat or power.
9.	eject	i.	The thick, middle part of a planet or of the Sun.
10.	mass	j.	Cause or allow something to be seen.
11.	reveal	k.	The length of time for which a person or animal lives or a thing functions.
12.	core	l.	Find out the amount or number of something using maths.
13.	fuel	m.	Throw something or someone out of something.
14.	calculate	n.	A large body of matter with no definite shape.

BEFORE READING / LISTENING

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

1. TRUE / FALSE: Read the headline. Guess if a-h below are true (T) or false (F).

1. The article says the Sun will not die soon. **T / F**
2. When the Sun becomes a red giant, it will expand to reach Mars. **T / F**
3. After our Sun turns into a red giant, it will become a comet. **T / F**
4. Humans will not be on Earth in two million years from now. **T / F**
5. The Sun is over 4.5 billion years old. **T / F**
6. The Sun is over half way through its life span. **T / F**
7. A professor is unhappy because he cannot calculate the age of stars. **T / F**
8. The professor said he can measure stars in faraway galaxies. **T / F**

2. SYNONYM MATCH: (The words in **bold** are from the news article.)

1. worked out	a. faraway
2. predict	b. die out
3. centre	c. sends out
4. expand	d. core
5. disappear	e. existence
6. quite	f. calculated
7. ejects	g. uncovers
8. reveals	h. fairly
9. presence	i. forecast
10. distant	j. stretch

3. PHRASE MATCH: (Sometimes more than one choice is possible.)

1. Scientists have worked out when	a. as far as Mars
2. It won't be any	b. in around one billion years
3. Its outer layers will expand	c. core
4. This is a bubble	d. galaxies
5. Humans will disappear	e. time soon
6. it is only around one third	f. and dust into space
7. it ejects a mass of gas	g. out of fuel
8. This reveals the star's	h. our Sun will die
9. it is running	i. into its lifespan
10. the presence of stars in distant	j. of gas and space dust

GAP FILL

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Scientists have worked out when our Sun will die. It won't be any (1) _____ soon. It will be in 10 billion years. The scientists are from the University of Manchester in the UK. They (2) _____ that in about 5 billion years from now, the Sun will (3) _____ into a "red giant". This is the (4) _____ name given to a star at the end of its life. When our Sun becomes a red giant, its centre will (5) _____. Its outer layers will expand as far as Mars. This means Earth will be (6) _____ and disappear. After our Sun turns into a red giant, it will become a planetary nebula. This is a (7) _____ of gas and space dust. The scientists say no humans will be on Earth when the Sun dies out. Humans will (8) _____ in around one billion years from now.

predict

bubble

scientific

burnt

disappear

time

turn

shrink

The Sun is still (9) _____ young in space years. It is just 4.6 billion years old. This means it is only around one third into its (10) _____. Professor Albert Zijlstra, a scientist from the University of Manchester, explained what (11) _____ at the end of a star's life. He said: "When a star dies, it (12) _____ a mass of gas and dust into space....This reveals the star's core. By this (13) _____ in the star's life, it is running out of fuel." He said it (14) _____ turns off and dies. Professor Zijlstra was happy that modern science can (15) _____ the age of stars and what will happen to them. He said we can measure the presence of stars in (16) _____ galaxies, and "we even have found out what the Sun will do when it dies".

lifespan

eventually

ejects

calculate

quite

distant

happens

point

LISTENING – Guess the answers. Listen to check.

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

1) Scientists have worked out when our Sun will die. It won't be _____
   a. many time soon
   b. any times moon
   c. any time soon
   d. any times swoon
2) When our Sun becomes a red giant, its _____
   a. centre will shrink
   b. centre will shrank
   c. centre will shrunk
   d. centre will shriek
3) it will become a planetary nebula. This is a bubble of gas _____
   a. and space dusty
   b. and space dusts
   c. and space dust
   d. and space adjust
4) The scientists say no humans will be on Earth when the _____
   a. Sun dies shout
   b. Sun die shout
   c. Sun die spout
   d. Sun dies out
5) Humans will disappear in around one billion _____
   a. years from know
   b. years from no
   c. years from now
   d. years from then
6) This means it is only around one third _____
   a. unto its lifespan
   b. onto its lifespan
   c. in two its lifespan
   d. into its lifespan
7) explained what happens at the end of _____
   a. a star's life
   b. a star strife
   c. a star slice
   d. a star's leaf
8) into space....This reveals _____
   a. the star's core
   b. the star score
   c. the stars cor!
   d. the star's curl
9) By this point in the star's life, it is running _____
   a. out of file
   b. out of foal
   c. out of feel
   d. out of fuel
10) He said we can measure the presence of stars _____
   a. in distance galaxies
   b. in distant galaxies
   c. in distant galaxy
   d. in disdain galaxies

LISTENING – Listen and fill in the gaps

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Scientists have (1) _____ our Sun will die. It won't be any time soon. It will be in 10 billion years. The scientists are from the University of Manchester in the UK. They (2) _____ about 5 billion years from now, the Sun will turn into a "red giant". This is the scientific name given to a star at (3) _____ its life. When our Sun becomes a red giant, its centre will shrink. Its outer layers will expand as far as Mars. This means Earth will (4) _____ disappear. After our Sun turns into a red giant, it will become a planetary nebula. This is a bubble of (5) _____ dust. The scientists say no humans will be on Earth when the Sun dies out. Humans will disappear (6) _____ billion years from now.

The Sun is still (7) _____ space years. It is just 4.6 billion years old. This means it is only around (8) _____ its lifespan. Professor Albert Zijlstra, a scientist from the University of Manchester, explained what happens at the end of a star's life. He said: "When a star dies, it (9) _____ of gas and dust into space....This reveals the star's core. By this point in the star's life, it is running (10) _____." He said it eventually turns off and dies. Professor Zijlstra was happy that modern science can calculate (11) _____ stars and what will happen to them. He said we can measure the presence of stars in distant galaxies, and "we (12) _____ out what the Sun will do when it dies".

COMPREHENSION QUESTIONS

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

1. What will the Sun become in 5 billion years from now?

2. What will happen to the centre of the Sun in 5 billion years from now?

3. Where will the outer layers of the Sun reach in 5 billion years from now?

4. What does a planetary nebula contain?

5. When will humans disappear from Earth?

6. How old is the Sun?

7. What is Albert Zijlstra's job?

8. What does a star eject into space when it dies?

9. What does a star run out of before it dies?

10. Where can a professor measure the presence of stars?

MULTIPLE CHOICE - QUIZ

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

1) What will the Sun become in 5 billion years from now?
a) nothing
b) a scary monster
c) a red giant
d) a mess

2) What will happen to the centre of the Sun in 5 billion years from now?
a) it will shrink
b) it will burn more brightly
c) it will explode
d) it will turn black in colour

3) Where will the outer layers of the Sun reach in 5 billion years from now?
a) the next galaxy
b) Mars
c) Pluto
d) Antarctica

4) What does a planetary nebula contain?
a) stars and galaxies
b) rock and comets
c) hydrogen and helium
d) gas and space dust

5) When will humans disappear from Earth?
a) in a 1,000 years from now
b) in 100 million years from now
c) in a billion years from now
d) no one knows

6) How old is the Sun?
a) 4.8 billion years old
b) 4.6 billion years old
c) 4.2 billion years old
d) 4.4 billion years old

7) What is Albert Zijlstra's job?
a) He's an astronaut.
b) He's a science fiction writer.
c) He's a rocket engineer.
d) He's a professor.

8) What does a star eject into space when it dies?
a) clouds and silver rain
b) gas and dust
c) comets and asteroids
d) hydrogen and helium

9) What does a star run out of before it dies?
a) dark
b) fuel
c) time
d) space

10) Where can a professor measure the presence of stars?
a) in distant galaxies
b) in his laboratory
c) on his computer
d) in our nearest galaxy

ROLE PLAY

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Role A – The Sun

You think the Sun is the most interesting thing in space. Tell the others three reasons why. Tell them why their things aren't as interesting. Also, tell the others which is the least interesting of these (and why): the Moon, Mars or distant galaxies.

Role B – The Moon

You think the Moon is the most interesting thing in space. Tell the others three reasons why. Tell them why their things aren't as interesting. Also, tell the others which is the least interesting of these (and why): the Sun, Mars or distant galaxies.

Role C – Mars

You think Mars is the most interesting thing in space. Tell the others three reasons why. Tell them why their things aren't as interesting. Also, tell the others which is the least interesting of these (and why): the Moon, the Sun or distant galaxies.

Role D – Distant Galaxies

You think distant galaxies are the most interesting things in space. Tell the others three reasons why. Tell them why their things aren't as interesting. Also, tell the others which is the least interesting of these (and why): the Moon, Mars or the Sun.

AFTER READING / LISTENING

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

1. WORD SEARCH: Look in your dictionary / computer to find collocates, other meanings, information, synonyms … for the words 'sun' and 'billion'.

sun	**billion**

- 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:

• worked • predict • life • layers • bubble • disappear	• young • happens • mass • fuel • age • even

THE SUN SURVEY

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Write five GOOD questions about the Sun 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.

THE SUN DISCUSSION

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

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'sun'?
3. What do you know about our Sun?
4. Do you worry about the Sun dying?
5. Can you imagine how long 10 billion years is?
6. How interested are you in space?
7. How do you feel about the Earth being destroyed by the Sun?
8. Will humans die out earlier because of climate change?
9. How can we make sure humans can survive on Earth?
10. Would you like to go into space?

Our Sun will die in 10 billion years from now – 17th November, 2022

THE SUN DISCUSSION

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

11. Did you like reading this article? Why/not?
12. What do you think of when you hear the word 'billion'?
13. What do you think about what you read?
14. What does the Sun do?
15. How can the Sun be dangerous?
16. What do you know about stars?
17. What do you know about galaxies?
18. Do you like the Sun or Moon better?
19. Would you like to live in a sunnier country?
20. What questions would you like to ask the scientists?

DISCUSSION (Write your own questions)

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

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

DISCUSSION (Write your own questions)

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

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

LANGUAGE - CLOZE

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Scientists have worked (1) _____ when our Sun will die. It won't be (2) _____ time soon. It will be in 10 billion years. The scientists are from the University of Manchester in the UK. They predict (3) _____ in about 5 billion years from now, the Sun will turn into a "red giant". This is the scientific name given to a star at the end (4) _____ its life. When our Sun becomes a red giant, its centre will shrink. Its outer layers will expand as far as Mars. This means Earth will be (5) _____ and disappear. After our Sun turns into a red giant, it will become a planetary nebula. This is a bubble of gas and space dust. The scientists say no humans will be on Earth when the Sun dies out. Humans will (6) _____ in around one billion years from now.

The Sun is still (7) _____ young in space years. It is just 4.6 billion years old. This means it is only around one third into its lifespan. Professor Albert Zijlstra, a scientist from the University of Manchester, explained what happens at the end of a star's (8) _____. He said: "When a star dies, it ejects a mass of gas and dust into space....This reveals the star's (9) _____. By this point in the star's life, it is running out of fuel." He said it eventually turns off and dies. Professor Zijlstra was happy that modern science can (10) _____ the age of stars and what will happen to them. He said we can measure the (11) _____ of stars in distant galaxies, and "we (12) _____ have found out what the Sun will do when it dies".

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

1.	(a)	of	(b)	in	(c)	up	(d)	out
2.	(a)	in	(b)	on	(c)	many	(d)	any
3.	(a)	so	(b)	that	(c)	when	(d)	what
4.	(a)	by	(b)	in	(c)	of	(d)	so
5.	(a)	burnt	(b)	blunt	(c)	brunt	(d)	bland
6.	(a)	disappear	(b)	gone	(c)	death	(d)	bye bye
7.	(a)	quite	(b)	quit	(c)	quiet	(d)	quilt
8.	(a)	death	(b)	day	(c)	life	(d)	voyage
9.	(a)	root	(b)	seed	(c)	pip	(d)	core
10.	(a)	calculator	(b)	calculate	(c)	calculated	(d)	calculation
11.	(a)	reward	(b)	gift	(c)	token	(d)	presence
12.	(a)	every	(b)	even	(c)	ever	(d)	event

SPELLING

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Paragraph 1

1. They cderpti that in about 5 billion years
2. This is the sienfitcci name
3. its centre will nrhsik
4. Earth will be burnt and raseipdap
5. a beblbu of gas and space dust
6. no hsamun will be on Earth

Paragraph 2

7. around one third into its leiafnsp
8. This levesra the star's core
9. it tyeneavllu turns off
10. ccauaeltl the age of stars
11. semreua the presence of stars
12. in sntidta galaxies

PUT THE TEXT BACK TOGETHER

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Number these lines in the correct order.

( ) from now, the Sun will turn into a "red giant". This is the scientific name given to a star at the end

(***1***) Scientists have worked out when our Sun will die. It won't be any time soon. It will be

( ) third into its lifespan. Professor Albert Zijlstra, a scientist from the University of Manchester, explained what

( ) of its life. When our Sun becomes a red giant, its centre will shrink. Its outer layers will

( ) say no humans will be on Earth when the Sun dies out. Humans will disappear in around one billion years from now.

( ) The Sun is still quite young in space years. It is just 4.6 billion years old. This means it is only around one

( ) off and dies. Professor Zijlstra was happy that modern science can calculate the age

( ) galaxies, and "we even have found out what the Sun will do when it dies".

( ) in 10 billion years. The scientists are from the University of Manchester in the UK. They predict that in about 5 billion years

( ) happens at the end of a star's life. He said: "When a star dies, it ejects a mass of gas and

( ) dust into space....This reveals the star's core. By this point in the star's life, it is running out of fuel." He said it eventually turns

( ) giant, it will become a planetary nebula. This is a bubble of gas and space dust. The scientists

( ) of stars and what will happen to them. He said we can measure the presence of stars in distant

( ) expand as far as Mars. This means Earth will be burnt and disappear. After our Sun turns into a red

PUT THE WORDS IN THE RIGHT ORDER

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

1. when die . Scientists out Sun our will worked

2. a Sun The turn red giant . will into

3. name a scientific star . The given to

4. disappear . This burnt will Earth and be means

5. around Humans billion one years . in will disappear

6. is Sun young years . still in The space

7. third It's its lifespan . around into only one

8. science stars . calculate can Modern age the of

9. in stars presence the Measure galaxies . distant of

10. out will do . Sun We found what the

CIRCLE THE CORRECT WORD (20 PAIRS)

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Scientists have worked *out / in* when our Sun will die. It won't be any time soon. It will be *at / in* 10 billion years. The scientists are from the University of Manchester in the UK. They *predict / prediction* that in about 5 billion years from now, the Sun will turn *into / onto* a "red giant". This is the scientific name *given / gave* to a star at the end of its life. When our Sun becomes a red giant, its centre will *stink / shrink*. Its outer layers will expand as far *has / as* Mars. This means Earth will be burnt and disappear. After our Sun turns into a red giant, it will become a planetary nebula. This is a *trouble / bubble* of gas and space dust. The scientists say *not / no* humans will be on Earth when the Sun dies out. Humans will disappear in around one billion years from *then / now*.

The Sun is still *quite / quit* young in space years. It is just 4.6 billion years old. This means it is only around one *third / thirds* into its lifespan. Professor Albert Zijlstra, a scientist from the University of Manchester, explained *that / what* happens at the end of a star's life. He said: "When a star *deaths / dies*, it ejects a mass of gas and *dust / dusty* into space....This *reveals / rebels* the star's *corn / core*. By this point in the star's life, it is running *out / in* of fuel." He said it eventually turns off and dies. Professor Zijlstra was happy that modern science can calculate the *age / old* of stars and what will happen to them. He said we can measure the presence of stars in *distant / distance* galaxies, and "we even have found out what the Sun will do when it dies".

Talk about the connection between each pair of words in italics, and why the correct word is correct. Look up the definition of new words.

INSERT THE VOWELS (a, e, i, o, u)

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Sc__nt_sts h_v_ w_rk_d __t wh_n __r S_n w_ll d__. _t w_n't b_ _ny t_m_ s__n. _t w_ll b_ _n 10 b_ll__n y__rs. Th_ sc__nt_sts _r_ fr_m th_ _n_v_rs_ty _f M_nch_st_r _n th_ _K. Th_y pr_d_ct th_t _n _b__t 5 b_ll__n y__rs fr_m n_w, th_ S_n w_ll t_rn _nt_ _ "r_d g__nt". Th_s _s th_ sc__nt_f_c n_m_ g_v_n t_ _ st_r _t th_ _nd _f _ts l_f_. Wh_n __r S_n b_c_m_s _ r_d g__nt, _ts c_ntr_ w_ll shr_nk. _ts __t_r l_y_rs w_ll _xp_nd _s f_r _s M_rs. Th_s m__ns __rth w_ll b_ b_rnt _nd d_s_pp__r. _ft_r __r S_n t_rns _nt_ _ r_d g__nt, _t w_ll b_c_m_ _ pl_n_t_ry n_b_l_. Th_s _s _ b_bbl_ _f g_s _nd sp_c_ d_st. Th_ sc__nt_sts s_y n_ h_m_ns w_ll b_ _n __rth wh_n th_ S_n d__s __t. H_m_ns w_ll d_s_pp__r _n _r__nd _n_ b_ll__n y__rs fr_m n_w.

Th_ S_n _s st_ll q__t_ y__ng _n sp_c_ y__rs. _t _s j_st 4.6 b_ll__n y__rs _ld. Th_s m__ns _t _s _nly _r__nd _n_ th_rd _nt_ _ts l_f_sp_n. Pr_f_ss_r _lb_rt Z_jlstr_, _ sc__nt_st fr_m th_ _n_v_rs_ty _f M_nch_st_r, _xpl__n_d wh_t h_pp_ns _t th_ _nd _f _ st_r's l_f_. H_ s__d: "Wh_n _ st_r d__s, _t _j_cts _ m_ss _f g_s _nd d_st _nt_ sp_c_....Th_s r_v__ls th_ st_r's c_r_. By th_s p__nt _n th_ st_r's l_f_, _t _s r_nn_ng __t _f f__l." H_ s__d _t _v_nt__lly t_rns _ff _nd d__s. Pr_f_ss_r Z_jlstr_ w_s h_ppy th_t m_d_rn sc__nc_ c_n c_lc_l_t_ th_ _g_ _f st_rs _nd wh_t w_ll h_pp_n t_ th_m. H_ s__d w_ c_n m__s_r_ th_ pr_s_nc_ _f st_rs _n d_st_nt g_l_x__s, _nd "w_ _v_n h_v_ f__nd __t wh_t th_ S_n w_ll d_ wh_n _t d__s".

PUNCTUATE THE TEXT AND ADD CAPITALS

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

scientists have worked out when our sun will die it wont be any time soon it will be in 10 billion years the scientists are from the university of manchester in the uk they predict that in about 5 billion years from now the sun will turn into a red giant this is the scientific name given to a star at the end of its life when our sun becomes a red giant its centre will shrink its outer layers will expand as far as mars this means earth will be burnt and disappear after our sun turns into a red giant it will become a planetary nebula this is a bubble of gas and space dust the scientists say no humans will be on earth when the sun dies out humans will disappear in around one billion years from now

the sun is still quite young in space years it is just 46 billion years old this means it is only around onethird into its lifespan professor albert zijlstra a scientist from the university of manchester explained what happens at the end of a stars life he said when a star dies it ejects a mass of gas and dust into spacethis reveals the stars core by this point in the stars life it is running out of fuel he said it eventually turns off and dies professor zijlstra was happy that modern science can calculate the age of stars and what will happen to them he said we can measure the presence of stars in distant galaxies and we even have found out what the sun will do when it dies

PUT A SLASH (/) WHERE THE SPACES ARE

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

ScientistshaveworkedoutwhenourSunwilldie.Itwon'tbeanytimesoo
n.Itwillbein10billionyears.ThescientistsarefromtheUniversityofMan
chesterintheUK.Theypredictthatinabout5billionyearsfromnow,theS
unwillturnintoa"redgiant".Thisisthescientificnamegiventoastaratth
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outerlayerswillexpandasfarasMars.ThismeansEarthwillbeburntand
disappear.AfterourSunturnsintoaredgiant,itwillbecomeaplanetaryn
ebula.Thisisabubbleofgasandspacedust.Thescientistssaynohumans
willbeonEarthwhentheSundiesout.Humanswilldisappearinaroundon
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4.6billionyearsold.Thismeansitisonlyaroundonethirdintoitslifespan.
ProfessorAlbertZijlstra,ascientistfromtheUniversityofManchester,e
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ulatetheageofstarsandwhatwillhappentothem.Hesaidwecanmeasur
ethepresenceofstarsindistantgalaxies,and"weevenhavefoundoutw
hattheSunwilldowhenitdies".

FREE WRITING

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

Write about **the Sun** for 10 minutes. Comment on your partner's paper.

ACADEMIC WRITING

From https://breakingnewsenglish.com/2211/221117-death-of-our-sun.html

We should start worrying about the death of the Sun. Discuss.

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 this news story. Share what you discover with your partner(s) in the next lesson.

3. THE SUN: Make a poster about the Sun. Show your work to your classmates in the next lesson. Did you all have similar things?

4. ASTRONOMY: Write a magazine article about making astronomy a must-study subject in schools. Include imaginary interviews with people who are for and against this.

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. WHAT HAPPENED NEXT? Write a newspaper article about the next stage in this news story. Read what you wrote to your classmates in the next lesson. Give each other feedback on your articles.

6. LETTER: Write a letter to an expert on the Sun. Ask him/her three questions about it. Give him/her three of your opinions on the Sun. Read your letter to your partner(s) in your next lesson. Your partner(s) will answer your questions.

ANSWERS

VOCABULARY (p.4)

1.	c	2.	d	3.	g	4.	e	5.	a	6.	f	7.	b
8.	k	9.	m	10.	n	11.	j	12.	i	13.	h	14.	l

TRUE / FALSE (p.5)

1	T	2	T	3	F	4	F	5	T	6	F	7	F	8	T

SYNONYM MATCH (p.5)

1. f	2. i	3. d	4. j	5. b
6. h	7. c	8. g	9. e	10. a

COMPREHENSION QUESTIONS (p.9)

1. A red giant
2. It will shrink
3. Mars
4. Gas and space dust
5. In one billion years from now
6. 4.6 billion years old
7. He's a professor
8. Gas and dust
9. Fuel
10. In distant galaxies

WORDS IN THE RIGHT ORDER (p.19)

1. Scientists worked out when our Sun will die.
2. The Sun will turn into a red giant.
3. The scientific name given to a star.
4. This means Earth will be burnt and disappear.
5. Humans will disappear in around one billion years.
6. The Sun is still young in space years.
7. It's only around one third into its lifespan.
8. Modern science can calculate the age of stars.
9. Measure the presence of stars in distant galaxies.
10. We found out what the Sun will do.

MULTIPLE CHOICE - QUIZ (p.10)

1.	c	2.	a	3.	b	4.	d	5.	c	6.	b	7.	d	8.	b	9.	b	10.	a

ALL OTHER EXERCISES

Please check for yourself by looking at the Article on page 2.
(It's good for your English ;-)