READING COMPREHENSION B2

The end of life on Earth?

It weighed about 10,000 tons, entered the atmosphere at a speed of 64,000km/h and exploded over a city with a blast of 500 kilotons. But on 15 February 2013, we were lucky. The meteorite that showered pieces of rock over Chelyabinsk, Russia, was relatively small, at only about 17 metres wide. Although many people were injured by falling glass, the damage was nothing compared to what had happened in Siberia nearly one hundred years ago. Another relatively small object (approximately 50 metres in diameter) exploded in mid-air over a forest region, flattening about 80 million trees. If it had exploded over a city such as Moscow or London, millions of people would have been killed.

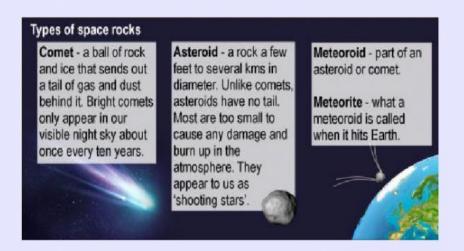
By a strange coincidence, the same day that the meteorite terrified the people of Chelyabinsk, another 50m-wide asteroid passed relatively close to Earth. Scientists were expecting that visit and know that the asteroid will return to fly close by us in 2046, but the Russian meteorite earlier in the day had been too small for anyone to spot.

Most scientists agree that comets and asteroids pose the biggest natural threat to human existence. It was probably a large asteroid or comet colliding with Earth which wiped out the dinosaurs about 65 million years ago. An enormous object, 10 to 16km in diameter, struck the Yucatan region of Mexico with the force of 100 megatons. That is the equivalent of one Hiroshima bomb for every person alive on Earth today.

Many scientists, including the late Stephen Hawking, say that any comet or asteroid greater than 20km in diameter that hits Earth will result in the complete destruction of complex life, including all animals and most plants. As we have seen, even a much smaller asteroid can cause great damage.

The Earth has been kept fairly safe for the last 65 million years by good fortune and the massive gravitational field of the planet Jupiter. Our cosmic guardian, with its stable circular orbit far from the sun, sweeps up and scatters away most of the dangerous comets and asteroids which might cross Earth's orbit. After the Chelyabinsk meteorite, scientists are now monitoring potential hazards even more carefully but, as far as they know, there is no danger in the foreseeable future.

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1. Choose the best option to complete these sentences.	d. scientists issued a warning for 2046	
1. The damage caused by the Russian meteorite	4. The Russian meteorite	
	a. had been predicted by scientists	
a. could have been much worse	b. came as a surprise	
b. was huge	c. was too small to worry about	
c. was greatly reduced by the early warning system	d. will come close to Earth again in the future	
d. was much worse than the one in Siberia one hundred		
years ago		
2. The Siberian meteorite		
a. hit a forest	5. Experts say that comets and asteroids could	
b. hit a big city	a. wipe out all animal life, leaving only plants	
c. caused glass to shower over people	b. kill a significant proportion of the Earth's human	
d. damaged trees when it exploded	population	
3. On the same day as the meteorite exploded over	r c. put an end to all plant and animal life on Earth	
Chelyabinsk,	d. cause as much damage as the Hiroshima bomb	
a. there was another, related, asteroid event	6. A small asteroid	
b. there was another, unrelated, asteroid event	a. can still cause a lot of damage	
c. scientists realised that an even bigger asteroid could	b. is not a problem if it is spotted early	

c. cannot cause any significant harm



hit Earth

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d. is act	tually more dangerous than a larger one	8. Scientists say		
7.	Earth has been relatively safe thanks to	a. it is impossible to monitor all the	e potential hazards	
a. pure	luck b. we are not in any danger for the moment			
b. luck	and the protective force of another planet from	c. a meteorite is likely to hit Earth	sooner or later	
our sola	d. their early warning systems will protect us			
c. early	warning systems set up by NASA			
d. luck	and our position in relation to the sun			
2. Check your vocabulary: gap fill Complete the gaps with a phrase from the box				
spot	injured	flattened	wiped out	
cross	struck	monitor	cause	
1.	. When the meteorite exploded on 15 February 2013, many people were			
	(hurt) by falling glass.			
2.	The explosion of another small object	(made flat) many	y trees.	
3.	Scientists weren't expecting the Russian meteorite because it had been too small for anyon			
	to (see or notice).			
4.	It was probably a large asteroid colliding	with Earth that	_ (made extinct)	
	the dinosaurs.			
5.	65 million years ago, an enormous objec	t (hit) the Yuc	atan region of	
	Mexico with a force of 100 megatons.			
6.	Even a much smaller asteroid can	(do) a lot of damage		
7.	Jupiter protects Earth by diverting away	7	oids that might	
	(pass from one side to	the other of) Earth's orbit.		
8.	Scientists will now (ob	oserve or check regularly over a	period of time)	
	potential hazards even more carefully.			

