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**AUFNAHMEPRÜFUNG FACHMITTELSCHULE,
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Englisch

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Asteroids

A

In 2010, the planetary defence team at NASA had identified and recorded 90 per cent of the asteroids near Earth measuring 1km wide. These 'near-Earth objects', or NEOs, are the size of mountains and include anything within 50 million kilometres of Earth's orbit. With an estimated 50 left to log, NASA says none of the 887 it knows about are a significant danger to the planet.

B

Now NASA is working towards logging some of the smaller asteroids, those measuring 140 metres wide or more. Of the 25,000 estimated asteroids of this size, so far about 8,000 have been logged, leaving 17,000 unaccounted for. Considering that a 19-metre asteroid that exploded above the city of Chelyabinsk in Russia in 2013 injured 1,200 people, these middle-sized asteroids would be a serious danger if they enter Earth's orbit.

C

Whether NASA can find the remaining middle-sized NEOs depends on getting the money to build NEOCam, a 0.5-metre space telescope which would use infrared light to locate asteroids. If it did get the money, it could probably achieve its goal in ten years. Once logged, the planetary defence team would still need to work out how to defend the planet against being hit by the truly worrying asteroids – the PHAs.

D

'Potentially Hazardous Asteroids' are rocks close enough to pass within 7.5 million kilometres of Earth's orbit. NASA has created a map of 1,400 PHAs, none of which are expected to be a threat in the next one hundred years. With technology already available, NASA can track these objects and make predictions about possible impact, at which point two defence solutions could be launched.

E

The first is DART – the Double Asteroid Redirection Test. Plans are scheduled to test DART on the moon of an asteroid called Didymos. 'Didymoon' is 150 metres wide, orbiting its 800-metre mother, and hopefully the impact of DART will knock it out of its orbit enough for Earth-based telescopes to pick up.

F

Another suggested defence against a PHA on course to hit Earth is to blow it up using a nuclear weapon. It may sound like a plot from a film, and it was the subject of the 1998 film *Armageddon*, but the Hypervelocity Asteroid Mitigation Mission for Emergency Response (HAMMER) is a genuine NASA proposal. The eight-ton rockets would be fired at an approaching asteroid with the hope of bumping it off course. If the asteroid was too close to Earth for this plan to work, the rockets would carry nuclear bombs to blow it up instead.

(Text from: www.britishcouncil.org/learnenglish)

Glossary:

to log:	to enter a fact into a systematic record
to be unaccounted for:	to be in an unknown location

Part A

Reading

**I Match the definitions (a–j) with the vocabulary (1–8) from the text.
There are two definitions too many.**

- 1) **b** an asteroid
- 2) **c** an orbit
- 3) **h** to pick up
- 4) **g** to track
- 5) **f** infrared
- 6) **j** significant
- 7) **i** hazardous
- 8) **d** to pass

a)	to walk swiftly
b)	a rock that flies through outer space
c)	the path of an object around a planet
d)	to go by
e)	a dark red colour
f)	a kind of light humans can't see without special glasses
g)	to follow the movement or progress of something
h)	identify
i)	dangerous
j)	likely to have influence or effect

_____ / 8 P.

II Match the paragraphs (A-F) in the text with the information it contains (1-6)

1. **C** Information about a plan that needs finance before it can happen
2. **F** An unrealistic-sounding way to solve the problem of an asteroid crashing into Earth
3. **D** Information about asteroids that are the biggest danger to Earth
4. **B** Information about the numbers of unidentified asteroids near Earth
5. **A** Information about NASA's most successful project to record asteroids near Earth
6. **E** A solution planned for testing

_____ / 6 P.

Part A**Reading**

III According to the text, decide whether the following statements are true or false.

	true	false
1) Earth doesn't appear to be in any danger from any asteroids that measure one kilometre wide.	X	
2) We don't need to worry about small asteroids under 20 metres wide.		X
3) The asteroid that exploded above a Russian town in 2013 was a "PHA" asteroid.		X
4) A special telescope will provide a complete defence against asteroids hitting Earth.		X
5) PHAs are the biggest concern, but they're still not an immediate threat.	X	
6) NASA's HAMMER defence strategy was first used in 1998		X
7) Didymoon is an asteroid		X
8) HAMMER may or may not need nuclear weapons to save Earth from an asteroid.	X	

_____ / 8 P.

Total Part A: _____ / 22 P.

Part B

Use of English

I In each group of three sentences, **only one is correct**. Write the letter of the **correct** sentence in the gap.

- 1) **B** A You don't have to smoke in here.
 B You mustn't smoke in here.
 C You don't must smoke in here.
- 2) **A** A When might the package arrive?
 B When will the package might arrive?
 C When the package might arrive?
- 3) **A** A Cathy will probably be late again.
 B Cathy probably will be late again.
 C Cathy won't probably be late again.
- 4) **B** A We definitely might not have time to see a film.
 B We definitely won't have time to see a film.
 C We definitely might have time to see a film.
- 5) **C** A We hadn't to do any homework.
 B We mustn't have to do any homework
 C We didn't have to do any homework
- 6) **C** A Tom might to be in his office at the moment.
 B Tom might being in his office at the moment.
 C Tom might be in his office at the moment.

_____ / 3 P.

II Which sentence is **NOT** correct. Write down the letter of the *incorrect sentence*.

- 1) **A** A We worked hardly.
 B They ran quickly.
 C The patient breathed heavily.
- 2) **C** A That girl walks very strangely.
 B That girl behaves very strangely.
 C That girl looks very strangely.
- 3) **B** A Mr Jones always works carefully.
 B Mr Jones always works lately.
 C Mr Jones always works silently.

Part B

Use of English

- 4) ___ **A** ___ A Your son runs very fastly.
B Your son runs very fast.
C Your son runs very quickly.
- 5) ___ **A** ___ A My uncle tells stories good.
B My uncle tells stories well.
C My uncle tells good stories.
- 6) ___ **B** ___ A Anna politely spoke to her teacher.
B Anna spoke polite to her teacher.
C Anna spoke politely to her teacher.

_____ / 3 P.

III Which word or phrase completes the sentence? Write A, B or C in the gap.

- 1) ___ **C** ___ the sun, the temperatures are low.
A Despite of
B Although
C Despite
- 2) John bought the watch ___ **A** ___ it was expensive.
A although
B however
C in spite
- 3) In spite of ___ **A** ___, the team won the match.
A their inexperience
B they were inexperienced
C their experience
- 4) He stayed up to watch the match ___ **B** ___ he was really tired.
A however
B even though
C despite of
- 5) We went indoors ___ **B** ___ cold weather outside
A due to it was
B due to the
C due the
- 1) I don't eat meat, ___ **B** ___, I eat fish.
A furthermore
B however
C moreover

_____ / 3 P.

Part B

Use of English

IV **Odd word out: You have to choose the word that is different from the other words and CIRCLE THE ODD WORD OUT.**

- 1) robber – burglar – thief – **beggar** – bandit
- 2) anxious – ambitious – annoyed – **adore** – attentive
- 3) **you** – its – her – our – my
- 4) peel – melt – fry – **iron** – grate
- 5) correct – appropriate – accurate – precise – **average**
- 6) deer – moose – **goose** – goat – sheep

_____ / 3 P.

V **Phonetics: In each line CIRCLE the word which is pronounced in a different way.**

- 1) meet – repeat – treat – complete – **need**
- 2) bear– **beard** – care – fair – heir
- 3) would – **blood** – wood – could – stood
- 4) head – dead – spread – **meat** – bread
- 5) horse – course – **worse** – source – divorce
- 6) **though** – enough – tough – rough – stuff

_____ / 3 P.

VI **Prepositions: Cross out the mistake in each of the following sentences and write the correct word next to the sentence. There is only one mistake per sentence.**

Example: 0) I had to get dressed ~~with~~ a hurry because I overslept. in

- 1) We were ~~to~~ the back of the queue and had to wait for an hour. _____ **at** _____
- 2) Where are those letters I left ~~at~~ the desk? _____ **on** _____
- 3) I saw a mistake at the beginning ~~from~~ the text. _____ **of** _____
- 4) Turn left on the next crossing. _____ **at** _____
- 5) That man over there keeps looking ~~after~~ you, Mary. Do you know him? _____ **at** _____
- 6) There aren't many public toilets ~~at~~ the city centre. _____ **in** _____

_____ / 3 P.

Part B

Use of English

VII Read the letter and circle the correct answer for each gap from the selection.

Dear Julie

As you know I (1)___ **B** ___ in Paris a week ago, but there was a problem with my luggage. Unfortunately, it had been sent to Lisbon instead of Paris. Someone (2)___ **C** ___ me from the airport to go there and pick up my luggage. That's why I (3)___ **C** ___ at home when you (4)___ **D** ____. At the time I (5)___ **A** ___ to find my suitcases among those which had arrived from Portugal. It (6)___ **C** ___ me the whole afternoon to do that. Well, I'm sure you want to know what's going on now in Paris.

The family who I (7) ___ **D** ___ with at the moment are very nice. They treat me exactly like one of them. They (8) ___ **B** ___ me to all of their friends. I share a room with the daughter of their family, who is about my age. Every morning her mother (9)___ **B** ___ us up with a cup of tea. Herbie, Jane's father, is also a nice guy. He lets Jane and me do everything we want. He even (10) ___ **A** ___ us to take his car when we want to go somewhere.

Tomorrow will be my first day at language school and I am really looking forward to it. They told me to be there at 9 o'clock. I (11)___ **C** ___ a placement test in the morning. I expect they (12)___ **A** ___ the results by the end of the day. As soon as I learn how I did, I will give you a call. Well, that's all for now. Please write soon.

Love, Claire

- | | | | |
|----------------------------|----------------------------------|--------------------------|--------------------------|
| 1) A was arriving | B arrived | C left | D was leaving |
| 2) A was telling | B was calling | C called | D told |
| 3) A was | B was being | C was not | D wasn't being |
| 4) A had phoned | B are phoning | C phone | D phoned |
| 5) A was trying | B tried | C had tried | D have tried |
| 6) A was taking | B taked | C took | D takes |
| 7) A stay | B was staying | C stayed | D am staying |
| 8) A already introduced | B have already introduced | C had already introduced | D are already introduced |
| 9) A was waking | B wakes | C woke | D is waking |
| 10) A allows | B allowed | C is allowing | D was allowing |
| 11) A was taking | B took | C am taking | D take |
| 12) A will announce | B are announcing | C announce | D announced |

Part B**Use of English****VIII Word formation: Write the correct form of the word in brackets to fill the gaps.**

1. Even very good clothes are quite affordable in this shop.
(AFFORD)
2. My mother had no idea that this vase was so valuable .
(VALUE)
3. I read a text with a detailed comparison of all the new mountain bikes. This one is the best.
(COMPARE)
4. She isn't wearing the most fashionable shoes.
(FASHION)
5. This is a good essay. I find your statements very convincing .
(CONVINCE)
6. It was an unforgettable day trip we had with our classmates.
(FORGET)

_____ / 3 P.

Total Part B: _____ / 27 P.

SOME POSSIBLE ANSWERS as a GRADING CRITERIA 2023

Describe in detail what you see, including where you think this is.

- A shark /big fish is in a roof /on a house /
- Gray shark/fish, blue sky, Red brick house, green gate, row house, detached house, apartment building, green bushes
- White paned windows / white windows
- Brick fence / wall
- Part of the house seems ruined / broken/ destroyed / abandoned. It has a hole in the roof and bushes/plants/trees growing out of the lower roof
- The house with the bushes look like an enchanted house as in Sleeping Beauty
- This could be in a British or American town or suburb, in a rather poor neighbourhood

What happened here, how did it happen?

- A shark / big fish crashed into the roof of a house
- A shark fell from the sky
- The shark was in a plane or helicopter being transported and fell out
- There was an explosion at an aquarium and the shark flew into the house
- It's from space / alien attack
- It's a movie set
- A shark wanted to attack someone and followed him home
- House decoration by the owner
- The owner is a fisherman, it's a decoration

Who or what do you think was responsible?

- The people transporting the shark didn't secure it well
- A plane exploded and the shark fell out onto the house, terrorists or mechanical failure
- The helicopter cable broke and the shark crashed
- Movie set designer
- Owner of house
- An angry neighbour is responsible for this
- The angry ex-wife/husband is responsible for this

Now what? What do you think will happen next?

- They will leave it as decoration / tourist attraction
- They will remove the shark, fix the roof
- Make shark steaks and put them on the grill for the neighbors to eat
- The entire building will be knocked down
- The rest of the building will be turned into a new aquarium
- The owner will sue the neighbour, the ex, helioper company...

What are your thoughts and/or feelings about this image? Explain.

- It's fascinating / interesting / mysterious / funny
- The shark looks fake because it's so stiff
- I like it because it's unexpected