



DOOMSDAY CLOCK CLOSER TO MIDNIGHT THAN EVER



Scan to review worksheet

Expemo code:

1DEL-F25F-VA8F

1

Warm up

Read the definition of doomsday below. How close do you think we were to it in these years? Put them in order from closest to doomsday (1) to furthest (6).

doomsday (n) = the last day of the world, when humankind ceases to exist

- 1947 – WWII has recently ended
- 1953 – tensions in the Cold War rise
- 1991 – the Cold War has just ended
- 2007 – North Korea conducts first nuclear bomb test
- 2015 – threat of nuclear war still exists, added to risks posed by global warming and AI
- 2024 – War in Ukraine still in progress





2 Listening



Part 1: Listen to the news report. How does the *Doomsday Clock* work?

<p>7 min to midnight</p> <p>1947</p> 	<p>2 min to midnight</p> <p>1953</p> 	<p>17 min to midnight</p> <p>1991</p> 
<p>5 min to midnight</p> <p>2007</p> 	<p>3 min to midnight</p> <p>2015</p> 	<p>90 sec to midnight</p> <p>2024</p> 

Part 2: Listen to the news report again and decide if the following sentences are true (T), false (F) or not given (NG).

- The Bulletin of the Atomic Scientists make the decision of what time it is on the Doomsday Clock. _____
- The creators of the atomic bomb also invented the Doomsday Clock. _____
- Doomsday Clock has always considered all threats to humankind. _____
- Since the creation of the Doomsday Clock, we have never been closer to extinction. _____
- The scientists consider climate change the biggest threat to mankind currently. _____



3 Focus on vocabulary

Replace the underlined parts of the questions with the correct form of the words in the box. You might also have to add words and change their order. Then answer the questions in pairs.

catastrophic (adj)	annihilation (n)	arsenal (n)	dissatisfaction (n)
devise (v)	hostility (n)	undermine (v)	treaty (n)

1. How do you feel about some countries having a collection of weapons capable of destroying our planet?

2. What reasons do governments have to show aggressive behaviour towards other countries?

3. What was the event that caused most people to suffer in history?

4. What events can make global peace efforts less effective?

5. Is it possible to come up with a global agreement that can prevent war altogether?

6. What is most likely to lead to the complete destruction of humankind?

7. Why do you think some governments choose to ignore international agreements between countries?

8. How do people often express that they are not happy with the actions of governments?





4 Reading for general context

Read the article about the Doomsday Clock. Were you correct in your predictions in the Warm up task?

The Doomsday Clock in history

At just 90 seconds to midnight, humankind is the closest it's ever been to extinction, according to experts at the Bulletin of the Atomic Scientists. Check out where the clock hands stood in other key moments in history.

1. 1947 – seven minutes to midnight

When the Doomsday Clock was created, WWII had recently ended with the catastrophic nuclear bombing of Hiroshima and Nagasaki, which claimed hundreds of thousands of lives. J Robert Oppenheimer (about whom Hollywood has recently made a blockbuster), along with his fellow creators of the atomic bomb, wanted to ensure nothing similar would ever happen and devised this tool to warn global leaders of how close we were to total annihilation.

2. 1953 – two minutes to midnight

In this year, tensions between the US and the Soviet Union were mounting. It was the early years of the Cold War, which would last until 1991. On November 1st, 1952, the US tested the first thermonuclear weapon, many times more powerful than those dropped at the end of WWII. In response, the Soviets tested their own hydrogen bomb in August the next year.

3. 1991 – seventeen minutes to midnight

The Doomsday Clock went to its furthest away from midnight this year due to the end of the Cold War. During the late 1980s and early 1990s, hostilities between the two global powers decreased. The Berlin Wall fell, the Iron Curtain was lifted and other significant political events took place. An unsuccessful invasion of Afghanistan and internal dissatisfaction led to the end of the Soviet Union, giving rise to 15 independent nations.

4. 2007 – five minutes to midnight

Even though a nuclear war is still considered by most experts the main threat to humankind, in this year the Bulletin of the Atomic Scientists started taking into account other global issues that could potentially result in the destruction of the planet. This change, added to North Korea conducting its first nuclear bomb test in 2006 and concerns that Iran might also be developing theirs, led the clock closer to midnight.

5. 2015 – three minutes to midnight

The modest efforts made to address climate concerns were considered insufficient by the body of scientists that control the Doomsday Clock. In addition, the United States and Russia started to modernise their nuclear arsenals, which undermined nuclear weapon treaties. The hands were brought even closer to midnight because global leaders were failing to address global risks appropriately and to ensure the preservation of humankind.

6. 2024 – 90 seconds to midnight

Despite calls for the hands to be brought even closer, the time on the Doomsday Clock remained at the same position as in 2023, which is the closest it has even been to midnight. This is largely due to the war in Ukraine, which, apart from itself being a threat to the existence of mankind, also undermines other global efforts to deal with other issues. Among the major threats identified this year are biological concerns, particularly regarding a new pandemic, the lack of significant action to deal with climate issues and the unregulated development of artificial intelligence.

sources: [bbc.co.uk](https://www.bbc.com), thebulletin.org



5 Reading for comprehension

Read the article again and complete the sentences below with no more than three words.

1. The Doomsday Clock is currently _____ away from midnight, which represents the end of humankind.
2. The Doomsday Clock was invented by the same scientists that devised the first _____.
3. Its initial purpose was to alert _____ of the risk of global nuclear war.
4. The bomb tested by the US in 1952 was significantly _____ than the ones dropped on Hiroshima and Nagasaki.
5. In 1991, the Doomsday Clock was at _____ from midnight as it has even been.
6. In 2007, the Bulletin of the Atomic Scientists started considering _____ (apart from nuclear war).
7. The modernisation of American and Russian nuclear weapons weakened the _____.
8. In comparison to last year, the Doomsday Clock in 2024 _____



6 Reading for details

Find words and phrases in the article on page three that match the meanings below.

Group 1

1. _____ (para. 1) = kill people
2. _____ (para. 1) = very popular film
3. _____ (para. 2) = rising, going up
4. _____ (para. 2) = the initial period
5. _____ (para. 3) = causing to happen



Group 2

1. _____ (para. 4) = considering
2. _____ (para. 4) = possibly lead to
3. _____ (para. 5) = little action
4. _____ (para. 6) = especially because of
5. _____ (para. 6) = especially about

7

Focus on language



Complete the missing gaps in the report below with one word. Then listen again and check.

According to the Bulletin of the Atomic Scientists, we have never _____¹ closer to the end of the world. Each year, these scientists are responsible for deciding where the hands _____² be on the Doomsday Clock. This device _____³ created in 1947 by Oppenheimer and other American scientists involved in creating the atomic bomb to represent the risk levels of total global destruction – the closer to midnight, the higher the chances of the world ending. It started as a tool to warn global leaders of the risk of a nuclear war, but _____⁴ 2007, _____⁵ also considers other man-made global threats _____⁶ as climate change and concerns with AI. Since _____⁷ creation, the Doomsday Clock has changed 76 times, and on January 23 this year, it was decided that it currently stands _____⁸ 90 seconds to midnight, the closest it has _____⁹ been. As a comparison, in 1998, when India and Pakistan staged nuclear weapon tests, the clock stood at 9 minutes _____¹⁰ midnight. The scientists' decision this year was based _____¹¹ the ongoing war in Ukraine, biological concerns _____¹² as the possibility of new pandemics, climate change and the development of artificial intelligence.





8 Talking point

In pairs, discuss the questions below.

1. What can members of the public do to help bring the Doomsday Clock back?
2. What is the biggest threat to humankind, in your opinion?
3. Is the Doomsday Clock useful? Why (not)?
4. Do you agree that the risk levels of annihilation have never been higher?
5. What do you think of survivalists (people who prepare for the end of the world, for example by building underground bunkers)?

9 Optional extension / homework

Part 1: In groups, discuss how you think the world will end using the cards below.

<p>Student A</p> <p>You believe humankind will cease to exist because of <u>nuclear war</u>.</p>	<p>Student B</p> <p>You believe humankind will cease to exist because of <u>climate change</u>. Research statistics and prepare your arguments.</p>
<p>Student C</p> <p>You believe humankind will cease to exist because of <u>a pandemic</u>. Research statistics and prepare your arguments.</p>	<p>Student D</p> <p>You believe humankind will cease to exist because of <u>artificial intelligence</u>. Research statistics and prepare your arguments.</p>

Part 2: In pairs, choose one situation and write a short dialogue. Perform it to the other students.

1. You want to bring the hands of the clock closer to midnight compared to last year.
2. You want the hands of the clock to be further from midnight compared to last year.



Transcripts

2. Listening

Newsreader: According to the Bulletin of the Atomic Scientists, we have never been closer to the end of the world. Each year, these scientists are responsible for deciding where the hands should be on the Doomsday Clock. This device was created in 1947 by Oppenheimer and other American scientists involved in creating the atomic bomb to represent the risk levels of total global destruction – the closer to midnight, the higher the chances of the world ending. It started as a tool to warn global leaders of the risk of a nuclear war, but since 2007, it also considers other man-made global threats such as climate change and concerns with AI.

Newsreader: Since its creation, the Doomsday Clock has changed 76 times, and on January 23 this year, it was decided that it currently stands at 90 seconds to midnight, the closest it has ever been. As a comparison, in 1998, when India and Pakistan staged nuclear weapon tests, the clock stood at 9 minutes to midnight. The scientists' decision this year was based on the ongoing war in Ukraine, biological concerns such as the possibility of new pandemics, climate change and the development of artificial intelligence.



Key

1. Warm up

5 mins.

Ask students to consider the events and think of how they represent a risk to humankind. They then order the years from the highest level of risk to the lowest. Answers may vary. Elicit some ideas, but do not confirm nor deny them at this stage because they will confirm their ideas when reading the article.

2. Listening

5 - 10 mins.

Part 1

Students listen to the news report and discuss in pairs how the clock works. Correct as a whole class. Sample answers:

The clock indicates how close we are to doomsday (the closer the hands are to midnight, the higher the risk); the position is decided each year by a board of scientists; when created, it referred only to the risk of nuclear war, but now it takes into consideration other global threats.

Part 2

Students read the sentences and try to remember if they are true or not. Students then listen again to the news report to confirm. Elicit correct answers, as well as why the false sentences are incorrect.

1. True (they determine the position of the hands each year)
2. True (Oppenheimer and other American scientists involved in creating the atomic bomb)
3. False (Only since 2007 – before that it only considered nuclear war)
4. True (90 seconds to midnight is the closest it's ever been.)
5. Not given (the report mentions several threats, but doesn't say which is considered the biggest)

3. Focus on vocabulary

10 mins.

Ask students to look at the words and think about what they mean. They then replace the underlined parts of the questions with the words in the box. Remind them that they may have to change some of the words, as well as their order. After correction, students answer questions in pairs and then elicit some ideas as a whole class.

1. How do you feel about some countries having an **arsenal** capable of destroying our planet?
2. What reasons do governments have to show **hostility** towards other countries?
3. What was the most **catastrophic** event in history?
4. What events can **undermine** global peace efforts?
5. Is it possible to **devise** a global agreement that can prevent war altogether?
6. What is most likely to lead to the **annihilation** of humankind?
7. Why do you think some governments choose to ignore international **treaties**?
8. How do people often express their **dissatisfaction** with the actions of governments?



4. Reading for general context

5 mins.

Ask students to read the article and check how accurate they were in the first task of the worksheet. Elicit which students got the most years in the correct order and why they chose that order. The correct order, according to the Bulletin of the Atomic Scientists, would be: (1) 2014; (2) 1953; (3) 2015; (4) 2007; (5) 1947; (6) 1991.

Article sources:

<https://www.bbc.co.uk/news/world-us-canada-68017445>

<https://thebulletin.org/doomsday-clock/timeline-and-statements/>

<https://www.bbc.co.uk/news/world-us-canada-64390663>

<https://www.bbc.com/future/article/20220119-how-to-read-the-doomsday-clock>

5. Reading for comprehension

10 mins.

Students read the article again and complete the sentences. Tell them they can only write one, two or three words.

- | | |
|----------------------------|------------------------|
| 1. ninety seconds | 2. atomic bomb |
| 3. global leaders | 4. more powerful |
| 5. its furthest | 6. other global issues |
| 7. nuclear weapon treaties | 8. remained the same |

6. Reading for details

5 - 10 mins.

Students find a word or phrase with the meanings given. The paragraphs are provided, but if necessary you can tell them how many words there are in each phrase. When correcting, elicit other example sentences with the phrases.

Group 1

- | | |
|-------------------|--------------------|
| 1. claim lives | 2. blockbuster |
| 3. mounting | 4. the early years |
| 5. giving rise to | |

Group 2

- | | |
|---------------------------|--------------------------|
| 1. taking into account | 2. potentially result in |
| 3. modest efforts | 4. largely due to |
| 5. particularly regarding | |

7. Focus on language

15 mins.

Ask students to complete the extract with one word in each gap. They can rely on what they remember from listening, as well as which words fit grammatically. They then listen again and check. After correcting, you can use the extract to practise shadowing, i.e., play the extract one more time and students read out along with the speaker (not afterwards).

- | | |
|---------|-----------|
| 1. been | 2. should |
| 3. was | 4. since |



- | | |
|---------|----------|
| 5. it | 6. such |
| 7. its | 8. at |
| 9. ever | 10. to |
| 11. on | 12. such |

8. Talking point

5 mins.

Students discuss the questions in pairs. Elicit some ideas as a whole class.

9. Optional extension / homework

Part 1

15 mins.

Students discuss how you think the world will end using the cards. Form small groups and assign a role to each student.

Part 2

10 mins.

In pairs, students choose a situation, write a dialogue and perform it to the other students. Students then choose the best performances.