ESA Warns of Space Junk Crisis: Earth’s Orbit Overcrowded

Description

The problem with debris in space around Earth is getting worse. According to the European Space Agency's yearly report, there is more and more space junk. We are putting satellites into space faster than they come back down. And there are way more broken satellites and spacecraft pieces than working ones. If we keep going like this, there could be a dangerous chain reaction where debris crashes into each other, creating even more debris. The risk of collisions in space is going up fast. Scientists say that even if we stop launching new things into space, the amount of debris will keep growing. This could make some orbits unsafe over time. It's important to clean up space around Earth and work together to keep it safe for everyone.

Vocabulary List:

1. **Debris** /dɪˈbriː/ (noun): Scattered pieces of waste or remains.
2. **Collisions** /kəˈlɪʒənz/ (noun): Instances of two or more objects striking each other.
3. **Satellites** /ˈsæt.əl.aɪts/ (noun): Artificial bodies placed in orbit around a planet.
4. **Unsafe** /ʌnˈseɪf/ (adjective): Not safe or secure; presenting a risk of danger.
5. **Reaction** /riˈækʃən/ (noun): An action or change resulting from a stimulus.
6. **Orbits** /ˈɔːr.bɪts/ (noun): The curved paths of celestial bodies around a star or planet.

Comprehension Questions

Multiple Choice

1. According to the European Space Agency's report, what is happening to the amount of debris in space around Earth?

Option: Decreasing steadily
Option: Staying constant
Option: Increasing
Option: Varying unpredictably

2. What is the main concern related to the growing amount of space junk?

Option: Increased satellite efficiency
Option: Formation of new planets
Option: Risk of collisions in space
Option: Development of new technologies

3. What kind of reaction could occur if debris in space crashes into each other?

Option: Creation of new satellites
Option: Formation of a protective layer
Option: Dangerous chain reaction
Option: Enhanced communication systems

4. What do scientists predict will happen to the amount of space debris even if we stop launching new objects into space?

Option: It will decrease rapidly
Option: It will stay the same
Option: It will disappear completely
Option: It will keep growing

5. What is highlighted as an important action in the content to address the issue of space debris?

Option: Increasing satellite launches
Option: Ignoring the problem
Option: Working together to clean up space
Option: Leaving space junk as it is

6. What could happen to some orbits over time if the space debris issue is not resolved?

Option: They will become more stable
Option: They will shrink in size
Option: They will become unsafe
Option: They will disappear

True-False

7. The risk of collisions in space is decreasing according to the European Space Agency's report.

8. Continued launch of new spacecraft contributes to the reduction of space debris.

9. Scientists warn about the potential dangers of a chain reaction caused by space debris collisions.

10. The content suggests that the amount of working satellites in space exceeds the amount of broken

ones.

11. The content emphasizes the importance of addressing the space debris issue collectively.

12. Space agencies are considering leaving space junk unattended to reduce costs.

Gap-Fill

13. According to the content, we are putting satellites into space faster than they come back down. As a result, the amount of space junk is _____.

14. Scientists warn of a dangerous chain reaction in space if debris crashes into each other, leading to the creation of even more _____.

15. One of the concerns raised is that even if new launches cease, the amount of space debris will continue to _____.

16. The content stresses the need to actively work together to clean up space around Earth and ensure safety for _____.

17. Some orbits may become _____ over time if the issue of space debris remains unaddressed.

18. The risk of collisions in space is _____ according to the information provided.

Answer

Multiple Choice: 1. Increasing 2. Risk of collisions in space 3. Dangerous chain reaction 4. It will keep growing 5. Working together to clean up space 6. They will become unsafe
True-False: 7. False 8. False 9. True 10. False 11. True 12. False
Gap-Fill: 13. increasing 14. debris 15. grow 16. everyone 17. unsafe 18. going up fast

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)

1. What can cause mutations in DNA and lead to cancer?

   Option: Radiation
   Option: Debris
   Option: Satellites
   Option: Ecosystems

2. What can be used to communicate instantly across the globe?

   Option: Strokes
   Option: Technology
   Option: Promotion
   Option: Habitat

3. Where is biodiversity essential for maintaining balance?

   Option: Production
   Option: Ecosystems
   Option: Risks
   Option: Unsafe

4. What leads to habitat destruction and pollution?

   Option: Significant
   Option: Urbanization
   Option: Risks
   Option: Orbits

5. What can render satellites unsafe for operation?

   Option: Radiation
   Option: Debris
   Option: Collisions
   Option: Promising

6. In what setting are hormonal imbalances often diagnosed and treated?

   Option: Clinical
   Option: Reaction
   Option: Exposure
   Option: Analyzing

7. Why is it necessary to be able to detect radiation exposure?

   Option: Reaction
   Option: Detection
   Option: Orbits

Option: Biodiversity

8. What kind of technology development offers new solutions?

Option: Promising
Option: Eager
Option: Analyzing
Option: Risks

9. Why is it important to analyze the effects of certain exposures on disabilities?

Option: Disabilities
Option: Stroke
Option: Instantly
Option: Habitat

10. What could happen to species due to habitat loss and urbanization?

Option: Pollution
Option: Extinct
Option: Biodiversity
Option: Technology

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. When individuals are _____ to radiation it can have harmful effects on their health.

12. Proper monitoring of radiation levels is _____ for ensuring safety in nuclear facilities.

13. _____ data from clinical studies helps in understanding the impact of certain factors on health.

14. Advancements in technology allow us to communicate _____ with anyone around the world.

15. Assessing the potential _____ associated with a certain activity is crucial for decision-making.

16. Space missions have to consider the risks of collisions with _____ in orbit.

17. Satellites are placed in specific _____ around the Earth to perform their functions.

18. Managing waste and pollution from industrial _____ is essential for environmental

protection.

19. Certain medical conditions are treated with _____ therapy to restore balance in the body.

20. Understanding the body's _____ to different stimuli is crucial in medical research.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

21. A stroke can result from a disruption of blood flow to the brain leading to potential brain damage.
22. Urbanization often results in increased pollution levels impacting the quality of air and water.
23. Debris orbiting Earth poses a significant risk to satellites in operation potentially causing collisions.
24. Habitat destruction contributes to the decline in biodiversity affecting various species and ecosystems.
25. Exposure to certain chemicals or substances can render a workplace unsafe for employees requiring safety measures.
26. In medical emergencies a quick and appropriate reaction to the situation can significantly impact the outcome.
27. The destruction of natural habitats due to human activities threatens many species with extinction.
28. A significant increase in temperature can have far-reaching effects on polar ice caps and global weather patterns.
29. Scientists and researchers are eager to explore new technologies to address pressing social and environmental issues.
30. Efficient communication is essential in emergency response situations to coordinate actions effectively.

Answer

Multiple Choice: 1. Radiation 2. Technology 3. Ecosystems 4. Urbanization 5. Collisions 6. Clinical 7. Detection 8. Promising 9. Disabilities 10. Extinct
Gap-Fill: 11. Exposed 12. Necessary 13. Analyzing 14. Instantly 15. Risks 16. Debris 17. Orbits 18. Production

19. Hormonal 20. Reaction

Matching sentence: 1. Stroke 2. Pollution 3. Satellites 4. Biodiversity 5. Unsafe 6. Reaction 7. Habitat 8. Significant 9. Eager 10. Communication

CATEGORY

1. Health - LEVEL2

Date Created
2025/04/09
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