

## 2032: Tunguska Impact Risk Doubles - ScienceAlert

## **Description**

In late 2024, astronomers saw a new asteroid in the sky. They named it 2024 YR4 because it was the 117th asteroid found in December 2024. It has a 2.3% chance of hitting Earth on December 22, 2032. This might sound like a movie, but it's not unusual.

The asteroid's orbit is tricky to predict due to gravitational pulls. It will come close to Earth in 2028, allowing astronomers to make accurate measurements. Even if it is likely to hit Earth, there is no need to panic.

We have time to deal with the asteroid, and it's not big enough to end the world. Evacuation plans can minimize the risk if it hits a populated area. The odds of impact may change, but experts believe they will go down to zero eventually.

Check NASA's Planetary Defense Page for updates on the asteroid. Remember, early calculations can change, so it's best to stay informed.

Original article from Universe Today. Read the original article.

# **Vocabulary List:**

- 1. **Asteroid** /'æs.tə.rɔɪd/ (noun): A small rocky body orbiting the sun typically found in the asteroid belt between Mars and Jupiter.
- 2. **Orbit** /'ɔ:r.bɪt/ (noun): The curved path of a celestial object around a star planet or moon.
- 3. **Gravitational** /,græv.ɪ'teɪ.ʃən.əl/ (adjective): Relating to the force that attracts objects toward one another based on their mass.
- 4. **Evacuation** /ɪ,væk.ju'eɪ.ʃən/ (noun): The act of leaving a place in order to escape from a dangerous situation.
- 5. Impact /'m.pækt/ (noun): The action of one object coming forcibly into contact with another.
- 6. Minimize /'mɪn.ɪ.maɪz/ (verb): To reduce something to the smallest possible amount or degree.

## **Comprehension Questions**

#### **Multiple Choice**

1. What did astronomers name the new asteroid discovered in late 2024?



Option: 2024 YR1 Option: 2024 YR2 Option: 2024 YR3 Option: 2024 YR4

2. What is the chance of the asteroid hitting Earth on December 22, 2032?

**Option: 1.5%** Option: 2.3% **Option: 3.8% Option: 5.1%** 

3. When is the asteroid expected to come close to Earth for accurate measurements?

Option: 2025 Option: 2026 Option: 2027 Option: 2028

4. What can minimize the risk if the asteroid hits a populated area? SL-NEWS

Option: Evacuation plans Option: Building shelters Option: Launching missiles Option: Praying for safety

5. Where can you find updates on the asteroid mentioned in the article?

Option: SpaceX website

Option: NASA's Planetary Defense Page Option: European Space Agency (ESA) portal

Option: Astronomy.com

6. What do experts believe will happen to the odds of impact eventually?

Option: They will increase

Option: They will remain the same

Option: They will fluctuate

Option: They will go down to zero eventually

#### **True-False**

7. The astronomers discovered the 117th asteroid in late 2024.



	8.	The	asteroid	is	big	enough	to	end	the	world	if	it hits	<b>Earth</b>
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- 9. According to the article, the asteroid is not unusual in terms of potential impact.
- 10. Early calculations about the asteroid can never change.
- 11. Astronomers are unable to predict the asteroid's orbit accurately due to gravitational pulls.
- 12. The article advises staying informed about the asteroid by checking NASA's Planetary Defense Page.

### **Gap-Fill**

13. What is the chance of the asteroid hitting Earth on December 22, 2032?	%
14. NASA's Planetary Defense Page provides updates on the	mentioned in the
article.	
15. Even if the asteroid is likely to hit Earth, there is no need to	<u>_</u> .
16. According to experts, the odds of impact will go down to	eventually.
17. The asteroid will come close to Earth in, allowing accurat	e measurements.
18. Evacuation can minimize the risk if the asteroid hits a po	pulated area.

#### **Answer**

Multiple Choice: 1. 2024 YR4 2. 2.3% 3. 2028 4. Evacuation plans 5. NASA's Planetary Defense Page

6. They will go down to zero eventually

**True-False:** 7. True 8. False 9. True 10. False 11. True 12. True **Gap-Fill:** 13. 2.3 14. asteroid 15. panic 16. zero 17. 2028 18. plans

## Vocabulary quizzes

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



1. Who are scientists who study celestial objects like stars planets and galaxies?

Option: Biologists Option: Meteorologists Option: Astronomers Option: Geologists

2. Which state of matter has a definite volume but takes the shape of its container?

Option: Solid Option: Gas Option: Liquid Option: Plasma

3. What are medications used to treat bacterial infections called?

Option: Painkillers Option: Vitamins Option: Antibiotics Option: Antihistamines

4. What force is responsible for keeping planets in orbit around the sun? ESL-NEWS

Option: Magnetic Option: Nuclear Option: Gravitational

Option: Frictional

5. Which type of radiation has a wavelength just shorter than that of visible light?

Option: Infrared Option: Ultraviolet Option: X-ray

Option: Gamma-ray

6. The process of growth maturation and change in living organisms is known as what?

Option: Decay

Option: Development Option: Stagnation Option: Destruction

7. What is the term for a general decline in mental ability severe enough to interfere with daily life?

Option: Depression Option: Anxiety Option: Dementia Option: Paranoia



8. What product can be applied to the skin to protect it from the harmful effects of the sun?	
Option: Body lotion	
Option: Sunscreen	
Option: Perfume	
Option: Makeup	
9. What term is used to describe the effect or influence of one thing on another?	
Option: Collision	
Option: Impact	
Option: Avoidance	
Option: Detachment	
10. What is the systematic investigation into and study of materials and sources to establish facts and reach new conclusions?	
Option: Guesswork	
Option: Research	
Option: Imagination	
Option: Supposition	
Option: Supposition	
Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)	
dap i iii ( i iii iii die blanks with the correct word from the vocabalary list. )	
11. A planet is one that has conditions suitable for life to exist.	
12 variants can play a role in the development of regulating disorders.	
13. Excessive exposure to ultraviolet can cause skin cancer.	
14. In case of a gravitational impact it is crucial to have a plan for to minimize	risk
15. A new asteroid was in orbit around Jupiter.	
16. Antibiotics are often used to treat bacterial infections that cause	
17. People with light sensitivity may benefit from wearing glasses.	
18 trials are essential in the development of new vaccines.	
19. The asteroid's orbit indicated its potential to come close to Earth.	
20. One way to reduce damage from solar radiation is to exposure to the sun.	



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

- 21. Scientists conducted extensive to understand the effects of the new medication.
- 22. An is a small rocky body that orbits the sun often found in the asteroid belt.
- 23. The moon stays in orbit around Earth due to the pull between the two celestial bodies.
- 24. A is a biological preparation that helps develop immunity to a specific disease.
- 25. Water is a common example of a substance that flows and takes the shape of its container.
- 26. Doctors prescribe to treat bacterial infections and prevent their spread.
- 27. Genetic can lead to different expressions of traits within a population.
- 28. As individuals age the risk of developing and other cognitive disorders increases.
- 29. Applying before going out in the sun can help protect your skin from UV rays.
- 30. Swelling redness and pain are common symptoms of caused by infections or injuries.

## **Answer**

**Multiple Choice:** 1. Astronomers 2. Liquid 3. Antibiotics 4. Gravitational 5. Ultraviolet 6. Development 7. Dementia 8. Sunscreen 9. Impact 10. Research

**Gap-Fill:** 11. Habitable 12. Genetic 13. Radiation 14. Evacuation 15. Discovered 16. Inflammation 17. Tinted 18. Clinical 19. Astronomical 20. Minimize

**Matching sentence:** 1. Research 2. Asteroid 3. Gravitational 4. Vaccine 5. Liquid 6. Antibiotics 7. Variants 8. Dementia 9. Sunscreen 10. Inflammation

### **CATEGORY**

1. Health - LEVEL2

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