



Unveiling the Massive 3D Universe Map: First Piece Revealed

Description

The cutting-edge Euclid telescope has unveiled a breathtaking mosaic containing millions of stars and galaxies, marking just the initial step in unraveling the intricate mysteries of the universe. Launched by the European Space Agency in July 2023, this remarkable mission aims to construct the most detailed 3D map of the cosmos to date, shedding light on the enigmatic "dark side" of the universe.

Crafted from 260 observations between March 25 and April 8, the first segment of the map boasts an impressive 208 gigapixels. However, this mere fraction of the survey represents a glimpse into Euclid's future ambitious endeavor of exploring the shape, distance, and movement of billions of galaxies across the celestial expanse.

Debuting at the International Astronautical Congress in Milan on October 15, this captivating mosaic incorporates around 100 million celestial bodies, offering scientists a tantalizing glimpse into the vastness of the cosmos. By delving into the realms of dark matter and dark energy, Euclid aims to uncover the elusive forces that govern the universe's structure and its inexplicable expansion.

With its panoramic scope rivalling that of NASA's James Webb Space Telescope, Euclid captures the intricate details of countless celestial entities, including the spiral galaxy within the Abell 3381 cluster situated 470 million light-years away. These observations provide astronomers with invaluable insights into the evolution of galaxies over billions of years and the role of dark matter and dark energy in shaping the cosmos.

Undoubtedly, Euclid's groundbreaking images herald a promising future, offering a tantalizing glimpse into the vast expanse that will be unveiled as the mission progresses. As Jason Rhodes from NASA's Jet Propulsion Laboratory aptly puts it, the images offer a glimpse into the vast canvas that Euclid will progressively reveal, enriching our understanding of the universe's intricate tapestry.

Vocabulary List:

1. **Mosaic** /məʊˈzeɪ.ɪk/ (noun): A picture or pattern produced by arranging together small colored pieces of hard material such as stone or glass.
2. **Unveil** /ʌnˈveɪl/ (verb): To reveal or disclose something for the first time.
3. **Enigmatic** /,en.ɪgˈmæt.ɪk/ (adjective): Difficult to interpret or understand; mysterious.
4. **Celestial** /səˈleɪs.tʃəl/ (adjective): Relating to the sky or outer space.
5. **Intricate** /ˈɪn.trɪ.kət/ (adjective): Very detailed or complicated.
6. **Govern** /ˈɡʌv.ərn/ (verb): To control or guide the actions of something.



Vocabulary quizzes

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

1. Which field of study focuses on the history of life on Earth through the analysis of fossils?
Option: A) Paleontological
Option: B) Computational
Option: C) Infrastructure
Option: D) Phenomenon
2. What is the term used to describe a situation that can be understood in multiple ways?
Option: A) Diminutive
Option: B) Phenomenon
Option: C) Ambiguity
Option: D) Spectacular
3. What is the ability to acquire and apply knowledge and skills called?
Option: A) Computational
Option: B) Intelligence
Option: C) Celestial
Option: D) Emulation
4. What term is used to describe the introduction of a new product or service to the market?
Option: A) Exhaustive
Option: B) Rollout
Option: C) Geomagnetic
Option: D) Significance
5. What does the term "access" refer to in the context of technology?
Option: A) Infrastructure
Option: B) Access
Option: C) Dazzle
Option: D) Mosaic
6. Which term is commonly used to describe objects in the sky and space such as stars and planets?
Option: A) Celestial
Option: B) Spectacular
Option: C) Infringement
Option: D) Govern
7. What word describes something that is mysterious and puzzling?



- Option: A) Infringement
- Option: B) Enigmatic
- Option: C) Exhaustive
- Option: D) Unveil

8. Which term relates to the Earth's magnetic field and its interactions with other magnetic fields?

- Option: A) Diminutive
- Option: B) Geomagnetic
- Option: C) Intricate
- Option: D) Piracy

9. What is a picture or pattern produced by arranging together small colored pieces of hard material?

- Option: A) Coronal
- Option: B) Infringement
- Option: C) Mosaic
- Option: D) Exhaustive

10. What is the term for the action of ruling or controlling a group of people?

- Option: A) Impeded
- Option: B) Coronal
- Option: C) Intriguing
- Option: D) Govern

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

11. The discovery of penicillin is considered a _____ event in the history of medicine.

12. The fireworks display on New Year's Eve was absolutely _____ .

13. The artist _____ added more details to the painting over several months.

14. The city's _____ includes roads bridges and public transportation systems.

15. The company plans to _____ its new product at the upcoming trade show.

16. Using someone else's work without permission can lead to copyright _____ .

17. The artist used different shades of blue to create a _____ effect in the sky.

18. The Northern Lights are a natural _____ that can be seen in the polar regions.



19. The diamonds in her necklace seemed to _____ in the sunlight.
20. Heavy snowfall _____ the progress of the travelers on the mountain road.

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

21. The detective conducted an search of the crime scene looking for clues.
22. The little girl carried a bag that seemed too small for her toys.
23. The design of the wood carving impressed everyone who saw it.
24. The sun's mass ejections can affect terrestrial communications.
25. Many ancient cultures believed that the movement of bodies influenced human affairs.
26. The new supercomputer is capable of performing complex tasks in seconds.
27. The Loch Ness Monster is a mysterious that has fascinated people for decades.
28. The artist created a beautiful of tiles on the courtyard floor.
29. The new movie has an plot that keeps viewers guessing until the end.
30. The discovery of the Higgs boson particle was of great to the field of physics.

Answer

Multiple Choice: 1. A) Paleontological 2. C) Ambiguity 3. B) Intelligence 4. B) Rollout 5. B) Access 6. A) Celestial 7. B) Enigmatic 8. B) Geomagnetic 9. C) Mosaic 10. D) Govern

Gap-Fill: 11. serendipitous 12. spectacular 13. gradually 14. infrastructure 15. unveil 16. infringement 17. gradation 18. phenomenon 19. dazzle 20. impeded

Matching sentence: 1. exhaustive 2. diminutive 3. intricate 4. coronal 5. celestial 6. computational 7. phenomenon 8. mosaic 9. intriguing 10. significance

CATEGORY

1. Sci/Tech - LEVEL6

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