



JWST Uncovers Early Galaxy Forming Like a Baby Milky Way

Description

A galaxy, found far away in the Universe, shows us what our young Milky Way might have looked like. This galaxy is nicknamed Firefly Sparkle. It is full of new stars and it formed 600 million years after the Big Bang.

Firefly Sparkle's light has traveled 13.2 billion years to reach us. We can see it because of a powerful space telescope and a special effect of gravity that helps us look at distant objects.

Astronomers found 10 groups of stars in Firefly Sparkle. They also measured its mass and found it is similar to the mass of our Milky Way when it was young.

The light from this galaxy appears as a bright, stretched line in the sky. Astronomers can understand its shape and features from this light. They say star formation happens at different times, showing many stages of life for the stars.

Firefly Sparkle gives us a rare view of how small galaxies grow. It is close to two other galaxies, showing they might interact and grow together.

More galaxies like Firefly Sparkle will be discovered, helping us learn more about the early Universe.

Vocabulary List:

1. **Galaxy** /'gæl.ə.ɡi/ (noun): A system of stars gas and dust held together by gravity.
2. **Astronomers** /ə'strɒn.ə.mərz/ (noun): Scientists who study celestial bodies and the universe.
3. **Formation** /fɔ:'rmeɪ.ʃən/ (noun): The action of forming or the process of being formed.
4. **Mass** /mæs/ (noun): The amount of matter in an object typically measured in kilograms or grams.
5. **Interaction** /,ɪn.tə'ræk.ʃən/ (noun): The manner in which two or more things influence each other.
6. **Discover** /dɪs'klʌ.ər/ (verb): To find something or someone unexpectedly or during a search.

Vocabulary quizzes

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

1. Which scientific theory explains the gradual changes in organisms over time?

Option: Natural Selection

Option: Complexity Theory

Option: Specialization



Option: Mass Interaction

2. Who are individuals seeking medical treatment from healthcare providers known as?

Option: Normal People

Option: Specialized Clients

Option: Test Subjects

Option: Patients

3. What term is used to describe a collection of stars planets and other celestial bodies?

Option: Meteor

Option: Constellation

Option: Galaxy

Option: Nebula

4. Which ancient human species is known to have coexisted with early modern humans?

Option: Researchers

Option: Neanderthals

Option: Specialists

Option: Fossils

5. What activity involves acquiring knowledge or understanding through research and analysis?

Option: Discover

Option: Change

Option: Improve

Option: Study

6. What term refers to the highest point or maximum value of something?

Option: Peak

Option: Bright

Option: Normal

Option: Count

7. What process involves investigating a subject to establish facts and reach new conclusions?

Option: Collected

Option: Formation

Option: Mass

Option: Research

8. What term describes ideas and concepts rather than specific objects or events?



- Option: Abstract
- Option: Special
- Option: Observe
- Option: Test

9. What event involves a large number of meteors entering Earth's atmosphere at the same time?

- Option: Mass Interaction
- Option: Meteor Shower
- Option: Interstellar Formation
- Option: Galactic Interaction

10. What term describes being highly skilled or trained in a specific field?

- Option: Discovery
- Option: Specialized
- Option: Intriguing
- Option: Complexity

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

11. _____ is the process through which organisms better adapted to their environment tend to survive and produce more offspring.

12. Organisms undergo _____ over time in response to environmental factors.

13. Scientists conduct experiments to _____ hypotheses and theories.

14. It is vital to accurately _____ the number of subjects in a research study.

15. Studying the behavior of _____ cells is crucial for understanding diseases.

16. Medical research aims to continuously _____ treatments and patient outcomes.

17. Astronomers use telescopes to _____ new planets and celestial bodies.

18. The _____ of stars involves complex processes of fusion and gravitational collapse.

19. The _____ of different species in an ecosystem can lead to ecological changes.

20. A _____ comet is visible to the naked eye even in daylight.



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

21. Understanding the intricate workings of the human brain is a task for scientists.
22. To gain expertise in a subject one must dedicate time and effort to and practice.
23. The of the Earth determines its gravitational pull on objects near its surface.
24. Archaeologists hope to ancient ruins that could provide insights into past civilizations.
25. A star shines luminously in the night sky visible even from great distances.
26. The natural of mountains involves tectonic processes and erosion over millions of years.
27. The exhibit displayed rare artifacts and historical documents from around the world.
28. After the field trip the students samples of rocks and plants for further analysis.
29. Scientific involves formulating hypotheses conducting experiments and analyzing data.
30. In a healthy ecosystem species with each other to maintain a balanced environment.

Answer

Multiple Choice: 1. Natural Selection 2. Patients 3. Galaxy 4. Neanderthals 5. Study 6. Peak 7. Research 8. Abstract 9. Meteor Shower 10. Specialized
Gap-Fill: 11. Natural Selection 12. Change 13. Test 14. Count 15. Normal 16. Improve 17. Discover 18. Formation 19. Interaction 20. Bright
Matching sentence: 1. Complex 2. Study 3. Mass 4. Discover 5. Bright 6. Formation 7. Special 8. Collected 9. Study 10. Interact

CATEGORY

1. Health - LEVEL1

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