

Article-Based Observation: Q

Directions: Read the article "[Emmy Noether's vision](#)" and then answer these questions:

1. When and where was Emmy Noether born, and who were her parents?

2. Describe Emmy Noether's education.

3. Where did Emmy Noether work?

4. What obstacles did Emmy Noether face during her pursuit of an academic career? Find a quote from a scientist mentioned in the article that exemplifies the challenge that she faced as a woman pursuing a career in academia.

5. What are conservation laws? Give an example of a law of conservation.

6. What is the difference between discrete and continuous symmetry? Give an example of continuous symmetry.

7. What is Noether's theorem? How does it relate to the conservation laws of energy, momentum and angular momentum?

8. Why is Noether's theorem important for a variety of real-world applications?

9. In what other ways is Noether's theorem important for modern physics?

10. Describe another one of Noether's theorems mentioned in the article. What else did she accomplish?

11. What questions do you still have after reading the article?

12. If you were asked to describe Emmy Noether to a friend, what would you say? Find a quote from the article that highlights her accomplishments.



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