

# READING PASSAGES WITH TEXT DEPENDENT QUESTIONS

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## MARGARET HAMILTON



Our journey through Women's History Month takes us to the world of computer science and space exploration, where Margaret Hamilton, a pioneering software engineer, made indelible contributions during the Apollo program. Born on August 17, 1936, in Paul, Indiana, Margaret Hamilton played a crucial role in ensuring the success of the historic moon landing missions.

In the 1960s, Hamilton became the Director of the Software Engineering Division of MIT Instrumentation Laboratory, which later became part of Draper Laboratory. She led a team responsible for developing the software for the Apollo missions, including the Apollo 11 moon landing in 1969.

Margaret Hamilton's groundbreaking work involved developing innovative software engineering concepts and introducing error detection and recovery systems. Her team's software played a vital role in preventing system overload and resolving potential conflicts during the critical phases of the Apollo missions.

One of Hamilton's notable achievements was the development of the priority scheduling system, a concept that allowed the Apollo spacecraft's software to prioritize tasks and manage workloads effectively. This innovative approach proved instrumental during the Apollo 11 mission, ensuring a safe descent and landing on the lunar surface.

Hamilton's contributions went beyond the Apollo program. She founded her own software company, Hamilton Technologies, and continued to advocate for the advancement of software engineering practices. In 2016, she was awarded the Presidential Medal of Freedom for her pioneering work.

Learning about Margaret Hamilton introduces them to the world of software engineering, the importance of problem-solving in technology, and the role of individuals in historic space missions.

As we celebrate Women's History Month, Margaret Hamilton stands as a testament to the vital role women played in the early days of computing and space exploration, inspiring future generations to reach for the stars in their own pursuits.

## COMPREHENSION QUESTIONS

6. What was Margaret Hamilton awarded in 2016 for her contributions to the Apollo program?

- Nobel Prize in Physics
- Turing Award
- Presidential Medal of Freedom
- NASA Exceptional Service Medal

7. What did Margaret Hamilton's software innovations become a model for?

- Military applications

## EXTENSION QUESTIONS

DATE: \_\_\_\_\_

What was Margaret Hamilton's role in the Apollo program?

What was the correct answer?

Hamilton's role was to develop the software for the Apollo program.

What was the correct answer?

Hamilton's role was to develop the software for the Apollo program.

Hamilton's work in the 1960s?

Hamilton's Laboratory

Hamilton's role in the Apollo space program?

9. What is the name of the computer controlled by the software developed by Margaret Hamilton?

- Apollo Control Computer
- Lunar Module Computer
- Apollo Guidance Computer
- Spacecraft Navigation Computer

5. What concept emerged from Margaret Hamilton's work on the Apollo mission?

- Space Engineering
- Hardware Engineering
- Software Engineering
- Guidance Engineering

## ANSWERS

1. a) August 17, 1936
2. a) MIT Instrumentation Laboratory
3. a) Software Engineering
4. a) Apollo Guidance Computer
5. a) Software Engineering
6. a) Presidential Medal of Freedom
7. a) Military applications
8. a) Software Engineering
9. a) Apollo Guidance Computer
10. a) Software Engineering

## READING COMPREHENSION