Women History Month

MARGARET HAMILTON

Reading Comprehension

NO-PREP & EDITABLE

Name _____   Date _____

MARGARET HAMILTON
Comprehension Questions

DIRECTIONS: CHOOSE THE CORRECT ANSWER.

1. When was Margaret Hamilton born?
- A. August 17, 1960
- B. August 17, 1936
- C. August 26, 1918
- D. August 26, 1936

2. Where did _____
- A. MIT's _____
- B. Earlham _____
- C. Brandeis _____
- D. NASA

3. What was _____
Apollo space _____
- A. Mathema _____
- B. Developi _____
- C. Designing _____
- D. Conduct _____

4. What is the _____
work?
- A. Advanced _____
- B. Apollo G _____
- C. Astrono _____
- D. Automa _____

5. Which awa _____
President Ba _____
- A. Nobel P _____
- B. Presider _____
- C. NASA Ex _____
- D. Women _____

6. In which fi _____
"software e _____
- A. Aeronau _____
- C. Compu _____

MARGARET HAMILTON

EARLY LIFE
Margaret Hamilton, the pioneering computer scientist and software engineer, was born on August 17, 1936, in Paoli, Indiana, USA. Margaret's fascination with mathematics and science began at an early age, and she showed a natural aptitude for problem-solving and analytical thinking. Despite the prevailing gender norms of the time, Margaret pursued her passion for technology with determination and resilience.

EDUCATION AND CAREER IN COMPUTING
Margaret Hamilton's academic journey become the cornerstone of her pioneering career in computing. With a b_____ ee i_____ mathematics from Earlham College, she _____ accomplishments. Her pursuit of higher _____ ande embarked on graduate studies in mathe_____ The early 1960s marked a pivotal momen_____ nt b_____ the Massachusetts Institute of Techn_____ the rapidly evolving field of computer _____

APOLLO SPACE PROGRAM
Margaret Hamilton's most significant c_____ during her work on the Apollo space pr_____ led a team of software engineers at MIT's Instrumentation Laboratory, where they developed the onboard flight software for the Apollo spacecraft. Margaret's pioneering work on the Apollo Guidance Computer (AGC) played a crucial role in enabling NASA to land astronauts on the Moon and return them safely to Earth.

SOFTWARE ENGINEERING INNOVATIONS
Margaret Hamilton's innovative approach to software engineering and

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was Margaret Hamilton's emphasis in he_____
ring innovations?
- eed and efficiency
- liability and error detection
- mplexity and redundancy
- raphics and user interface

year was Margaret Hamilton born?
- 0
- 0
- 8

d did Margaret Hamilton _____
exploration through c_____
- dal
- ce Act Award

legacy is described as _____

and software engineers _____

NS:

_____ t Hamilton born?
_____ in the

_____ rt's legacy in the ro_____

ACHIEVEMENT

Margaret Hamilton's exceptional contributions to both the Apollo space program and the field of software engineering have garnered her widespread recognition and acclaim. Among the numerous awards and honors bestowed upon her, Margaret received the prestigious NASA Exceptional Space Act Award, highlighting the extraordinary nature of her work in advancing space exploration through computing. Furthermore, in 2016, President Barack Obama awarded Margaret the Presidential Medal of Freedom, a testament to her profound impact on technology and innovation. Additionally, Margaret Hamilton has been rightfully inducted into the Women in Technology International Hall of Fame, solidifying her status as a pioneering figure in computing and a trailblazer for women in STEM fields.

IMPACT

Margaret Hamilton's impact on computing extends far beyond the Apollo space program. Her innovative software engineering and her emphasis on reliability and safety have influenced software engineers and developers. Her legacy serves as a reminder of the rigorous design and testing practices reliable and secure software sy...

LEGACY

Margaret Hamilton's legacy as a pioneering computer software engineer will endure For generations to come. Her groundbreaking work on the Apollo Guidance Computer For future advances in space exploration and helped field of software engineering as a critical component technology. Margaret's legacy serves as an inspiration to push the boundaries of innovation and make a lasting world.

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EDUCATION AND CAREER IN COMPUTING

Margaret Hamilton's academic journey became the cornerstone pioneering career in computing. With a bachelor's degree in mathematics from Earlham College, she set the stage for accomplishments. Her pursuit of higher education continued embarked on graduate studies in mathematics at Brandeis The early 1960s marked a pivotal moment as Margaret be the Massachusetts Institute of Technology (MIT), immers the rapidly evolving field of computer science..

APOLLO SPACE PROGRAM

Margaret Hamilton's most significant contribution to c during her work on the Apollo space program at NASA. led a team of software engineers at MIT's Instrumen Laboratory, where they developed the onboard flight s Apollo spacecraft. Margaret's pioneering work on the Computer (AGC) played a crucial role in enabling NASA astronauts on the Moon and return them safely to E

SOFTWARE ENGINEERING INNOVATIONS

Margaret Hamilton's innovative approach to software her emphasis on reliability and error detection revolu of computer science. She pioneered the concept of engineering" as a distinct discipline and developed gr techniques For software design and verification. Ma the groundwork for modern software development helped to establish the field of software engineering profession.

Answers Key

MULTIPLE-CHOICE QUESTIONS:

1. B. August 17, 1936
2. B. Brandeis University
3. A. Developing onboard flight software
4. B. Apollo Guidance Computer
5. C. Presidential Medal of Freedom
6. C. Computer Science
7. B. Reliability and error detection
8. C. 1918
9. NASA Exceptional Space Act Award
10. C. Computer scientists and software engineers

EXPLANATORY QUESTIONS:

1. Margaret Hamilton was born on August 17, 1936, in Paoli, Indiana, U.
2. Margaret Hamilton led a team of software engineers at MIT's Instrumentation Laboratory, developing onboard flight software For the Apollo spacecraft.
3. Margaret Hamilton pioneered the concept of "software engineering emphasizing reliability and error detection, revolutionizing the field
4. Margaret Hamilton received the NASA Exceptional Space Act Award the Presidential Medal of Freedom, and induction into the Women in Technology International Hall of Fame.
5. Margaret Hamilton's legacy include impacting software engineering, receiving awards for her contributions, and serving as a inspiration for innovation in computing

READING COMPREHENSION

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1. When was Margaret Hamilton born?
- A. August 17, 1960
- B. August 17, 1936
- C. August 26, 1918
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2. Where did Margaret Hamilton pursue her graduate studies?
- A. MIT's Instrumentation Laboratory
- B. Earlham College
- C. Brandeis University
- D. NASA

3. What was Margaret Hamilton's significant contribution to the Apollo space program?
- A. Mathematical calculations
- B. Developing onboard flight software
- C. Designing spacesuits
- D. Conducting experiments on the Moon

4. What is the term "AGC" associated with in Margaret Hamilton's work?
- A. Advanced Guidance Center
- B. Apollo Guidance Computer
- C. Astronaut Guidance Control
- D. Automated Guidance Console

5. Which award did Margaret Hamilton receive in 2016 from President...
- ...eedom
- ...ct Award
- ...nternational Hall of Fame

...Hamilton pioneer the concept of
- B. Mathematics
- D. Physics

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7. What was Margaret Hamilton's emphasis in her software engineering innovations?
- A. Speed and efficiency
- B. Reliability and error detection
- C. Complexity and redundancy
- D. ...and user interface

...was Margaret Hamilton born?

...ligious award did Margaret Hamilton receive for her ...ncing space exploration through computing?
- ...eace Prize
- ...ional Gold Medal
- ...xceptional Space Act Award
- ...Medal

...t Hamilton's legacy is described as a beacon of ...for:
- ...ists
- ...ists
- ...uter scientists and software engineers
- ...onomers

...HENSION QUESTIONS:

...n and where was Margaret Hamilton born?

...t role did Margaret Hamilton play in the Apollo space ...?

...did Margaret Hamilton contribute to the field of software ...ing?

...hat awards and honors did Margaret Hamilton receive for her ...butions?

...hat is Margaret Hamilton's legacy in the field of computing?

Answers Key

MULTIPLE-CHOICE QUESTIONS:

1. B. August 17, 1936
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3. B. Developing onboard flight software
4. B. Apollo Guidance Computer
5. A. Presidential Medal of Freedom
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