



# Lesson Guide

This lesson guide accompanies the following video lesson:

### 11 Famous African American Mathematicians

Complete each mini-profile for each of the following mathematicians:

Birth Year: \_\_\_\_\_



Benjamin Banneker is best known for building America's first \_\_\_\_\_\_.

What did Banneker accurately predict in 1789?

In 1791, Banneker famously penned an influential letter to then Secretary of State

#### 2.) Fern Hunt

Birth Year:

Fern Hunt is best known for her work in:



She was inducted into the Association for Women in Mathematics Hall of Fame in

#### 3.) Mark Dean

Birth Year:



Dean is a famous computer scientist and engineer credited with assisting in the development of breakthrough technologies at what company?

What did he invent? What did he co-invent?

Dean was inducted into the National Inventor's Hall of Fame in \_\_\_\_\_\_.

#### 4.) Lonnie Johnson

Birth Year: \_\_\_\_\_



Johnson is a famous inventor, mathematician, and engineer who holds over \_\_\_\_\_ patents.

He served as an engineer what which branch of the U.S. military?

What invention is Lonnie Johnson best known for?

### 5.) Annie Easley

Birth Year: \_\_\_\_\_



| Easley was a famous NASA                      | and                                     |
|-----------------------------------------------|-----------------------------------------|
| who contributed to                            | several space programs.                 |
| Most notably, she was a leading member of the | he team that developed the breakthrough |
| rocket.                                       |                                         |

What was Easley's famous nickname while working at NASA?

#### 6.) Elbert Frank Cox

Birth Year:



In 1925, Elbert Frank Cox became the first black man in the world to earn:

In 1957, Cox became the chairman of the mathematics department at what distinguished university?

In \_\_\_\_\_\_, the Howard University Mathematics Department established the Elbert F. Cox Scholarship Fund for....

#### 7.) Mae Carol Jemison

| Birth Year:                                                                                       |
|---------------------------------------------------------------------------------------------------|
| What did Jemison accomplish in 1992?                                                              |
| What was the name of the space shuttle that she went aboard into orbit?                           |
| Before becoming an astronaut, Jemison spent time as a general practice physician and in the       |
| 8.) Valerie Thomas  Birth Year:                                                                   |
| Thomas is a scientist best known for inventing thein 1980.                                        |
| This technology was the first of its kind in the filed of 3D-imagery and is the basis for modern: |
| At NASA, she managed the team that developed thetechnology that supported the first               |

#### 9.) Katherine Johnson

| Birth Year: |  |  |  |  |  |  |  |
|-------------|--|--|--|--|--|--|--|
|-------------|--|--|--|--|--|--|--|



What critically acclaimed film was Johnson the main character of?

| Her contributions in the field of  |                                   | , alongside fellow |
|------------------------------------|-----------------------------------|--------------------|
| female African American mathematic | cians                             | and                |
| we                                 | re critical to the United States' | success in putting |
| astronaut                          | _ into orbit in 1962.             |                    |
| What award was she given in 2015 l | by President Barack Obama?        |                    |

## 10.) Euphemia Lofton Haynes

Birth Year:



Euphemia Lofton Haynes is famous for being the first African American woman to...

After earning her Ph.D., she embarked on a \_\_\_\_\_-year career of advocacy for students of color, improving schools, and overcoming the harmful effects of racial segregation.

Haynes was the first African American woman to hold what distinguished position from 1960-1968?

# 11.) John Urschel

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| Birth Year:                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| What two things did Urschel excel in at Penn State University?                                                                                                                                    |
| In 2014, Urschel was drafted into the NFL by the                                                                                                                                                  |
| He is currently working towards his Ph.D. in mathematics from where some of his mathematical fields of interest include graph theory, numerical linear algebra, and machine learning.             |
| Extra Credit                                                                                                                                                                                      |
| Choose one of the famous African American mathematicians from today's list and research three additional interesting facts about this person using either books from the library or the internet. |
| Famous Mathematician:                                                                                                                                                                             |
| # Interesting Fact                                                                                                                                                                                |
| 1                                                                                                                                                                                                 |