

# International Women's Day at Highlands School

Imagine a gender equal world.

A world free of bias, stereotypes, and discrimination.

A world that's diverse, equitable, and inclusive.

A world where difference is valued and celebrated. Together we can forge women's equality.

Collectively we can all #EmbraceEquity.

International Women's Day, 8th March 2023





# **Equality vs Equity**

What is the difference between equality and equity?



**Equality** 

Treating each person the same and giving everyone equal access to opportunity.

**Equity** 

Providing proportional resources so that everyone can reach the same goal.

Equity aims to identify and eliminate barriers that prevent the full participation of some groups. It is important to recognise that we do not all start from the same place and must acknowledge and make adjustments to imbalances.



# **Hidden Figures**

- Hidden figures are people, in particular women, who have made significant contributions to society today.
- They have often gone unnoticed and lack acknowledgement. This is sometimes
  because the barriers and prejudices of that time meant that they did not receive
  equal acknowledgement for the work that they did at that point.
- How we remember people makes a huge difference to how they are celebrated today.

# The film 'Hidden Figures'

- Hidden Figures tells the true story of the African-American women 'computers' who used their resourcefulness and ingenuity to help NASA to propel the first man into space.
- It is centred around the NASA base in Virginia in the south of the USA in 1961.
- At this time, American society was segregated, the US was involved in the space race with the USSR and the feminist movement was in its early days.





# Key terms from 'Hidden Figures'

#### Segregation

A law in the US which meant that African Americans were separated from other races in society.

It was outlawed by the 1964 Civil Rights Act which activists such as Dr Martin Luther King protested for.





#### Space race

A competition between the USSR and the United States of America to see who could make the most progress with space flight, in order to assert their nation's superiority into space and for national security.



#### Who are these women?





#### Katherine Johnson

A female mathematician who helped land the first man on the moon.

Katherine Johnson, mathematician, graduated from West Virginia State College and was a member of the Alpha Kappa Alpha Sorority, Inc. She was a teacher before the National Advisory Committee for Aeronautics (later NASA) hired her in 1953 to work in the segregated West Area Computing Unit at Langley Aeronautical Laboratory.

She was soon transferred to the Flight Research Division, where she performed crucial calculations for path-breaking missions including the United State's first manned spaceflight (1961), first orbital spaceflight (1962), and the first manned moon landing (1969).

Before retiring in 1986, she also worked on the Space Shuttle. President Barack Obama awarded her the Presidential Medal of Freedom in 2015.

#### What did Katherine Johnson do?

Katherine Johnson attended a board meeting whose aim was to calculate where John Glen, the astronaut, would land.

As the only female, Black, African-American woman in a room full of White American men, she was able to demonstrate this to the team.



#### Who are these women?





Mary Jackson, aerospace engineer was born in Hampton and graduated from Hampton Institute in 1942. The National Advisory Committee for Aeronautics (later NASA), hired her in 1951 to be a 'human computer' in the segregated West Area Computing Unit at Langley Aeronautical Laboratory.

In 1958 she became NASA's first African-American female engineer. Her researched focused on airflow around aircraft, and she contributed to Projects Mercury and Apollo.



Jackson later worked to advance the careers of other female engineers and scientists. She was a member of Alpha Kappa Alpha Sorority, Inc., a Girl Scout leader and a volunteer in many civic organisations.

#### What did Mary Jackson do?

Mary Winston defied societal expectations and became the first female African-American engineer.

She went onto to support the space missions of Apollo and Mercury.



### Who are these women?



# Dorothy Vaughan FORTRAN computer language expert.

Dorothy Vaughan, mathematician, graduated from Wilberforce University and was a member of the Alpha Kappa Alpha Sorority, Inc. During World War II, she left her job as a teacher to work for the National Advisory Committee for Aeronautics (NACA), later NASA, at the Langley Memorial Aeronautical Laboratory near Hampton.

She was assigned to the West Area Computing Unit, a group of African-American women responsible for processing aeronautical research data.

In 1949, Vaughan became NACA's first
African-American supervisor. she excelled at
FORTRAN computer programming language and
contributed to the Scout launch vehicle project, a
crucial component of the space programme, before
retiring in 1971.



#### What did Dorothy Vaughan do?

Dorothy Vaughan performed complex computations and analysed data for aerospace engineers, work that was later essential to the success of the early U.S. space programme.



# What barriers did they face?

#### Racial barriers:

- They were questioned by the police on their way to work.
- The policeman was 'shocked' that the African-American women worked at NASA.
- The White female boss calls Katherine 'coloured' and tells her not to be an embarrassment.
- Katherine needs to use the segregated bathroom a mile away from the office.
- Mary Jackson says that the 'finish lines are moved just when they are about to get ahead'.
- The women are expected to put up with poor work conditions on account of their race.
- Mary is stared at by students when she enters the college to study engineering.
- The African-American NASA workers stand in a separate line from their White colleagues to welcome the astronaut to their base.

## **Equity?**

- These women were smart, brave, determined and ambitious and they remind us of what can be achieved if we embody those characteristics.
- They didn't achieve 'equality'. Segregation in America was only outlawed in 1964 and racism exists today. Today only one one in five people working in core science engineering or maths are women.
- What we can see today is that equality is possible. Laws such as the Equalities Act 2010, have been introduced to ensure the same rights are afforded to all, regardless of circumstance.
- The question remains how equality can lead to equal outcomes.



# Other Hidden Figures

Solitude "La Mulatresse" (female mulatto)



- 'Mulatto' is a Spanish term referring to Black-mixed people.
- In 1806, Solitude led hundreds of slaves to freedom, leading revolts and fighting off French troops all while eight months pregnant.
- She remains a symbol for all women, who against all odds, defended the ideals of freedom and equality.
- "Live free or die" were Solitude's last words when she was executed for her involvement in the 1802 slave rebellion in Guadeloupe.

#### Josephine Baker

- The first African-American woman to star in a motion picture.
- She dreamt of becoming a dancer in the U.S. but she was rejected for her dark skin.
- In 1963, she spoke at the March on Washington alongside Martin Luther King Jr where he delivered his "I Have a Dream" speech, Josephine was the only official female speaker.
- She introduced Rosa Parks and Daisy Bates among other Black women fighting for civil rights.
- Despite the success of her performing and activist career,
   Josephine refused to perform to segregated audiences.
- During WWII, she became a spy for the French resistance against the Nazis.
- Later on in her life, she adopted 12 children from all over the world proving that racial harmony was possible.

