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South African STEAM heroes

Pre-reading questions

1. What is a hero? What do you need to do to become a hero?
2. Can you name any South African heroes? Why are they heroes?
3. Do you have any heroes? Explain.

We live in a great country. There are many people who have helped to make this country great.

There are people from the past and people today whom we call our heroes.



I am Mama Angela. Join me as we explore ten of South Africa's past and present STEAM heroes.

I am not talking about the steam that you see when water boils.
I am talking about Science, Technology, Engineering, Arts and Mathematics.



S Science
T Technology
E Engineering
A Arts
M Mathematics.

Science heroes

Christiaan Barnard was born in Beaufort West in 1922. He was a doctor who did operations on people's hearts.



He performed the world's first human heart transplant. Imagine getting another person's heart! Today, doctors around the world perform many transplants.

A heart transplant is when someone gets a new heart because their heart does not work properly.

Tebello Nyokong is a professor. She has won many Science awards. She fell in love with science because of her love for nature.



Professor Nyokong used to be a shepherd. She could not go to school every day, but she never gave up on her dream to become a scientist. She is now looking for ways to help people with cancer.

Technology heroes

Seymour Papert was born in Pretoria in 1928.



Seymour was a professor who recognised the importance of computers in education. He came up with the idea for Logo, the first programming language for children. It helped children develop their thinking and problem-solving skills. He also created the Mindstorms robotics kit with LEGO.

Dr Baratang Miya started the GIRLHYPE academy. She helps women and girls to develop and grow in the fields of technology and business.



Imagine one of the technology heroes helped you create a robot. What kind of robot would you create? What would you want it to be able to do?



She has given women a way to learn about coding and science, especially those who do not have a lot of money. Her academy has helped teach many women and girls!

Engineering heroes

Thomas Charles John Bain was born in Graaff-Reinet in 1830. He was a road engineer. He was in charge of planning and building roads and mountain passes. We still use many of these roads today.



Roads are important because they allow vehicles to travel from one place to another. Why is it important to plan them carefully?



Rory Byrne is one of South Africa's most famous engineers. He designs cars for Formula One, a motorsport in which teams race one another.

Rory's cars have won more than a hundred races.



Did you know?

A Formula One car can go from zero to 160 kph (kilometres per hour) in just four seconds. The cars go so fast and turn so sharply that the drivers feel like they are being squished! This feeling is called g-force. The 'g' stands for gravity.

Arts heroes

Miriam Makeba was born in 1932. Her nickname was Mama Africa. She was a singer and actress and sang many popular Afropop and jazz songs.



Do you know any songs sung by Miriam Makeba? Try find one and listen to it.

Mama Africa also fought against racism in South Africa. She wanted to make sure that everyone could be seen as equal and important. She used her fame to spread love, unity, and joy around the world.

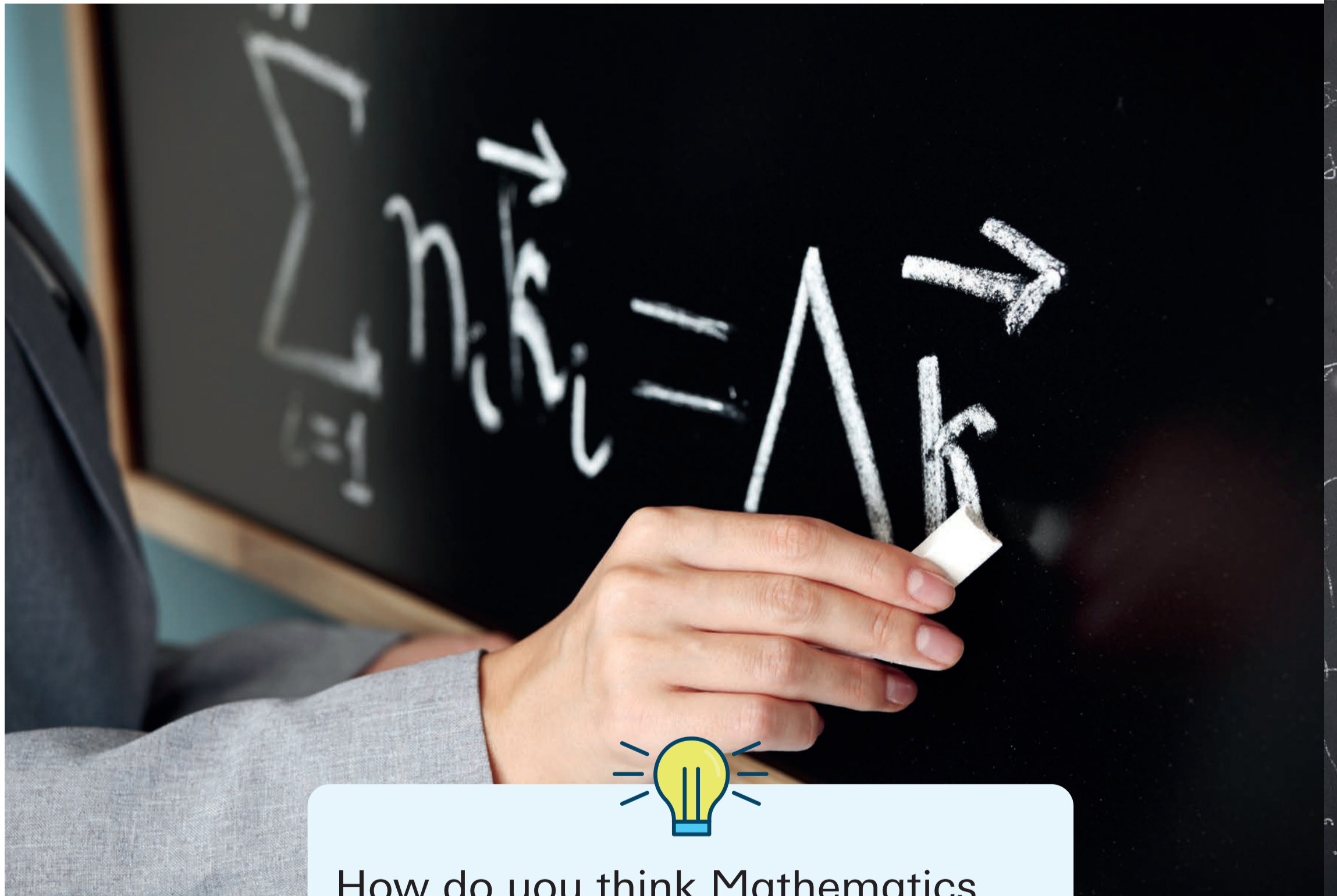
Abdullah Ibrahim is a jazz artist. He was born in Cape Town in 1934. He is famous for playing the piano and writing music. When he was 25 years old, Abdullah formed a band called the Jazz Epistles. It was the first black South African band to record a jazz album.



Abdullah also fought against apartheid. His famous song, called 'Mannenberg', was a protest song. Many people, young and old, enjoy listening to his music. He has even started a jazz academy in Cape Town.

Mathematics heroes

Henda Swart was born in 1939. She was a university professor. Henda was interested in finding ways to help us solve everyday problems in many areas of life.



How do you think Mathematics can help solve everyday problems?

Some people may find Mathematics difficult. Henda was able to make mathematics fun and easier to understand.