What is a Mathematician?

A mathematician uses mathematics to answer questions.

So we are all mathematicians- yah!

Lots of people use mathematics in their jobs everyday.

- Computer programmer
- Doctor
- Shop assistants
- Teachers
- Game designer
- Astronauts
- Architects

In fact it is difficult to think of a job where you don't use mathematics!

Famous Mathematicians take a step beyond this. They are people whose discoveries and experiments changed the world and they way we see it.
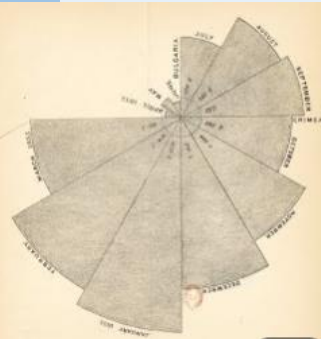
Florence Nightingale (1820 – 1910)

Question- can I use statistics to improve medical care in the Crimean war?
Nightingale devised an early version of a pie chart, called a "polar area diagram", and used this as a means of communicating complex statistical information in a visual way that aided Understanding.

Background- From the age of thirty-five to the age of sixty-five, Nightingale reported debilitating symptoms such
as chronic chest pains, headaches, muscle fatigue, upper back pain and being unable to concentrate when in the company of more than one person.

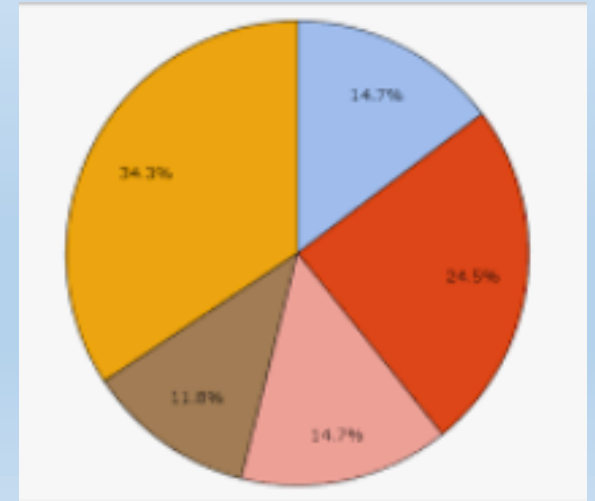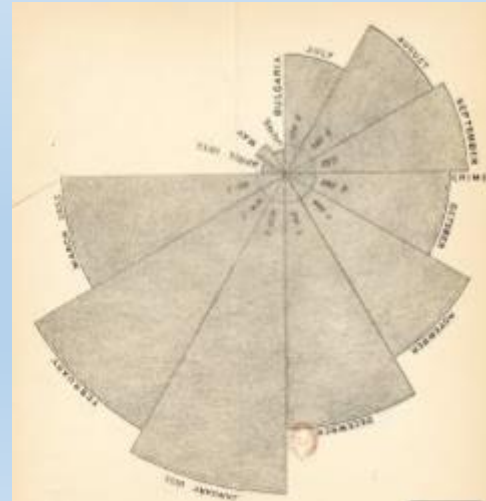**Achievements**- Nightingale became the first female member of the Royal Statistical Society in 1859.

Florence Nightingale (1820 – 1910)

Question- can I use mathematics to give people information? This is called statistics.
Nightingale devised an early version of a pie chart, called a "polar area diagram.

Achievements- Nightingale became the first female member of the Royal Statistical Society in 1859.

Kate Adebola Okikiolu (1965 –)

Question- can you hear the shape of a drum?
Her field of study is called spectral geometry.

Achievements-she won a Sloan Research Fellowship – becoming the first Black recipient of this fellowship. In the same year, she was awarded a Presidential Early Career Award for Scientists and Engineers for both her mathematical research and her development of mathematics curricula for inner-city school children. This award is given to only 60 scientists and engineers each year and has a prize of $500 000.-

Background-At high school, Kate Okikiolu developed an interest in art and maths. She was also an outstanding athlete.
Despite being part of a family of mathematicians, she learnt maths on her own from textbooks. She also spent a lot of time studying art and wanted to pursue a career as an artist. However, she was convinced by her family to work for a maths degree first, to ensure she could always earn a living.

Kate Adebola Okikiolu (1965 –)

Question- can you hear the shape of a drum?
Her field of study is called geometry.

Interests
Athletics
Art

triangles   rectangles   polygons   circles