

Title: Famous scientists: a world view

LO: To **describe** characteristics of successful scientists.

- **Do now:**

1. What did Rosalind Franklin do?
2. What did Florence Nightingale do?
3. What did Hedy Lamar do?

Key words: Workplace skills, character, 9 habits

Title: Famous scientists: a world view

LO: To **describe** characteristics of successful scientists.

• Do now:

1. What did Rosalind Franklin do? **Contributed to the discovery of the structure of DNA**
2. What did Florence Nightingale do? **Pioneered hygiene in hospitals**
3. What did Hedy Lamar do? **Invented the technology we now call Bluetooth**

Key words: Workplace skills, character, 9 habits

Title: Famous scientists: a world view

LO: To **describe** characteristics of successful scientists.



Name some world scientists and their discoveries scientists.



Recall the dispersal of knowledge from ancient scientists.



Consider whether the history of science has been whitewashed.

Are these scientists?



Mainly:

Old



White



Male



Privileged





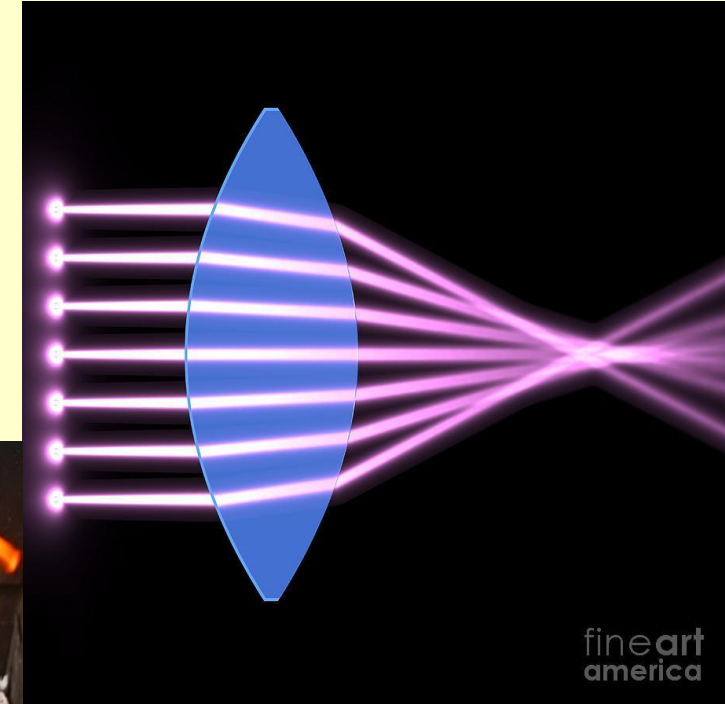
Pause point



What did rich European men have access to that gave them such a privileged place in science in the 17th and 18th centuries.

1. They were cleverer
2. They had more education
3. they were richer

The world has a long scientific history

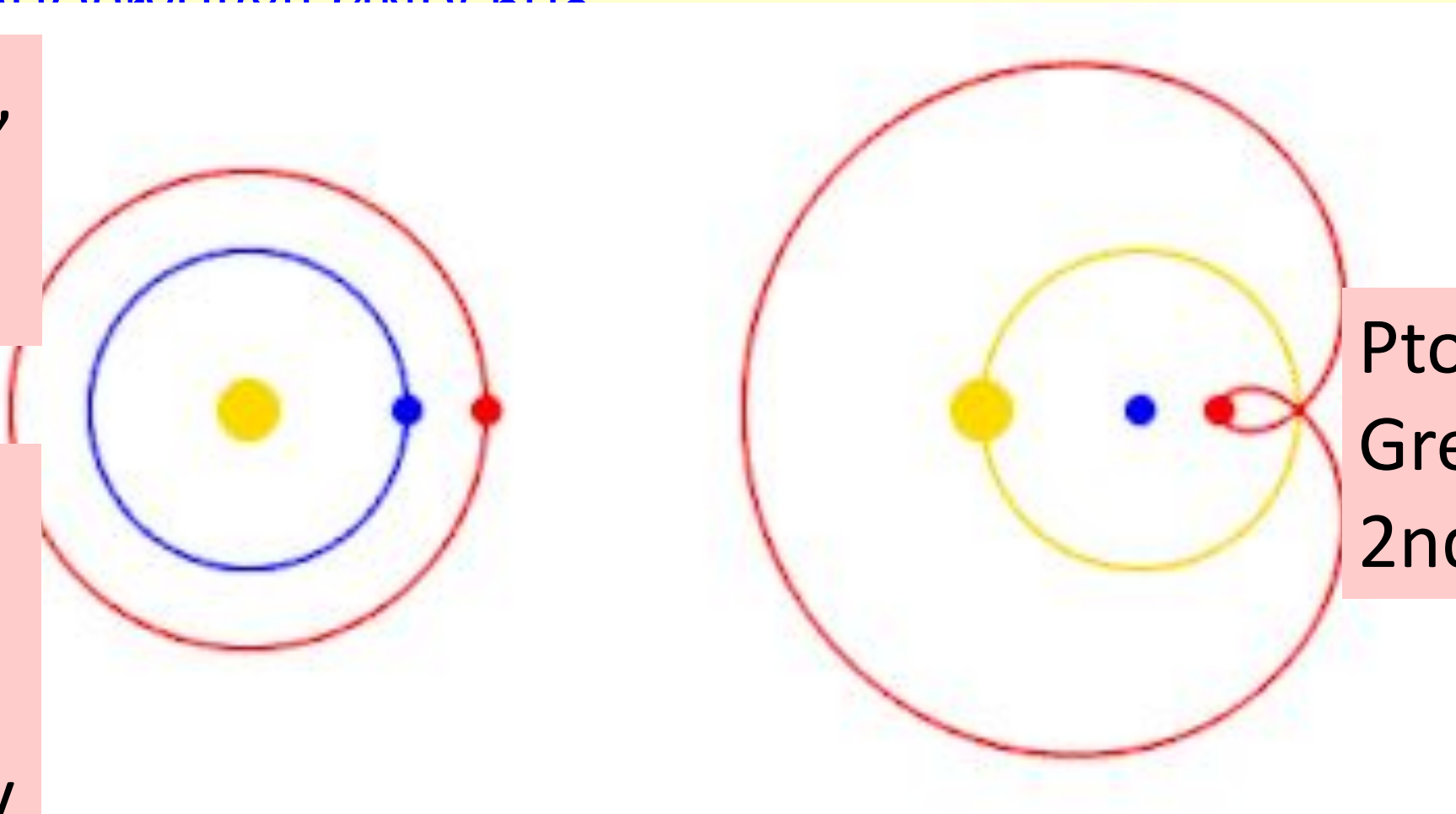


...and science was "borrowed".

<https://www.youtube.com/watch?v=4-IHyUYaAIU&list=PLBThhL8p7If>

Copernicus,
Italy – 16th
century

Nope! Al
Battani,
Damascus,
9th Century



Ptolemy,
Greece –
2nd century



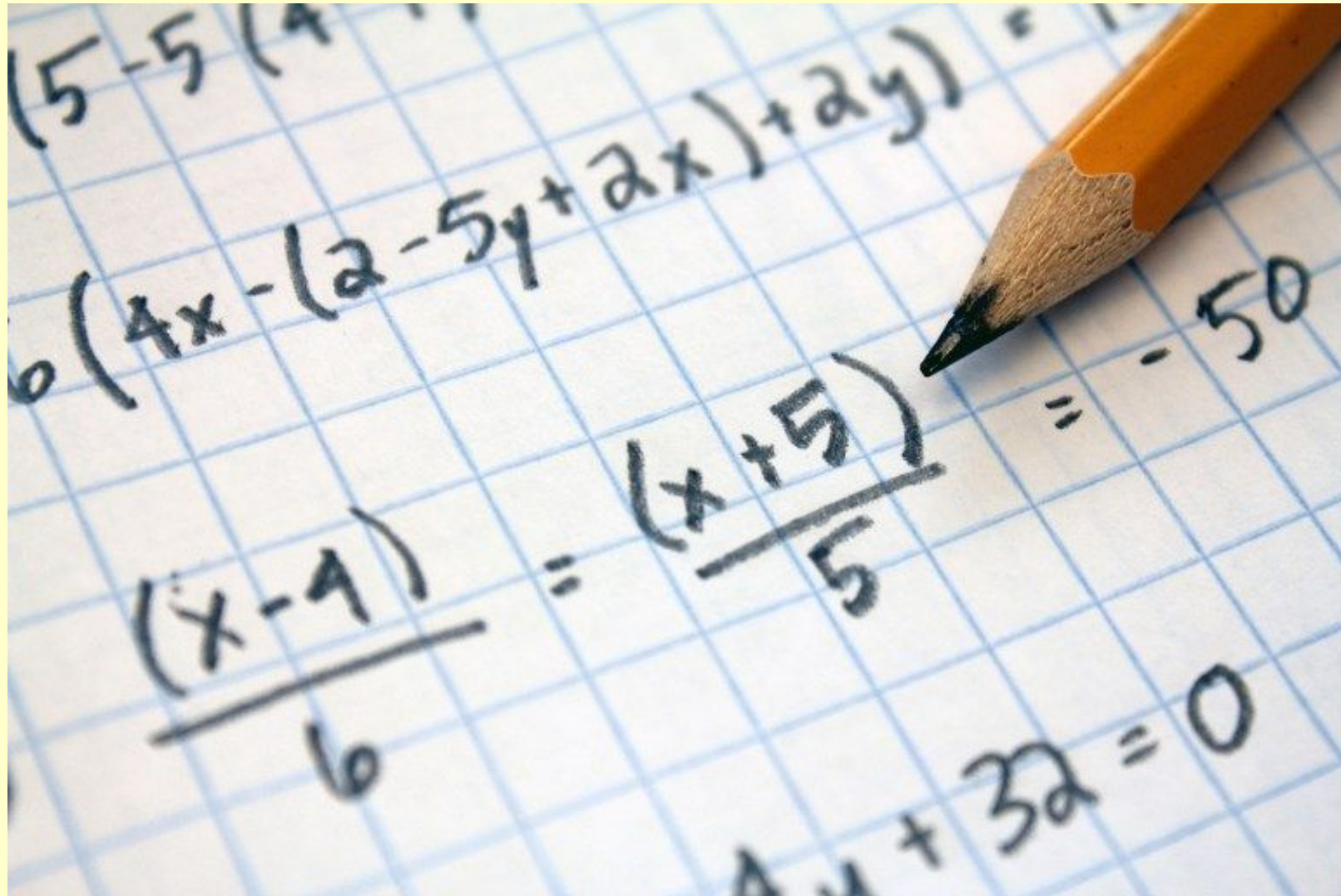
Pause point



Which 3 scientific discoveries can we credit to scientists outside Europe?

1. Gunpowder, alkali, DNA
2. Alkali, gunpowder, optics
3. DNA, the structure of the atom, gravity

Maths in science





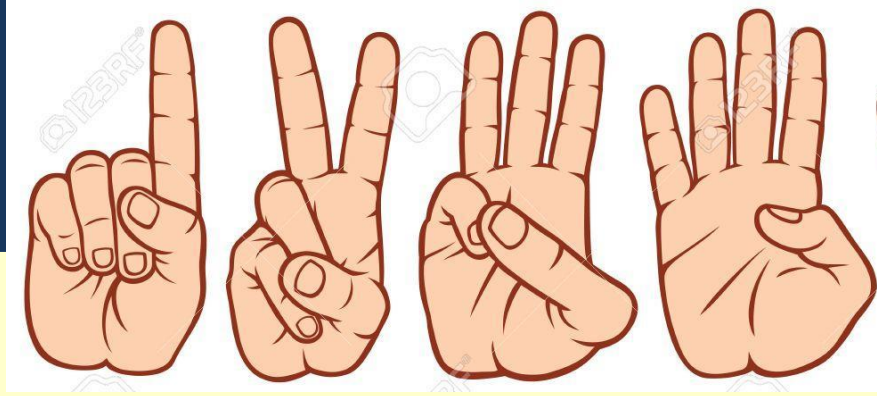
Writings of ancient Greek and Roman philosophers translated and preserved in the great libraries of the North African Muslim empire

The North African Muslim empire valued knowledge and discovery and built wonderful libraries. Their science was brought into Europe predominantly through Spain.

Knowledge from Eastern and Southern Asia brought into Europe along the Silk Road



Pause point



Why was the Islamic empire so significant in the history of science?

1. Learning and discovery were treasured
2. Great libraries were built to preserve knowledge
3. The discoveries and writings of the Romans and Greeks were translated
4. All of the above

Key knowledge
Eurocentric
India
China.
North African Muslim empire

Look, cover, write, check

Key knowledge	
Eurocentric	A limited view that focuses only on Europe
India	An area which made many advancements in mathematics
China.	Many early scientific innovations including gunpowder
North African Muslim empire	A mediaeval region which valued knowledge and discovery. Preserved the works of the Greeks and Romans in famous libraries.

Application task – I do

I believe the Eurocentric view of science dominated by white men is wrong because...

The first reason I think this is...

The second reason I think this is...

In conclusion...

Application task – I do

I believe the Eurocentric view of science dominated by white men is wrong because there is a long history of science in other parts of the world, particularly, China, India and North Africa/the Middle East.

The first reason I think this is that gunpowder was invented in China over 100 years ago. This invention has had a huge impact on the lives of humans.

The second reason I think this is that much discovery and learning was done in the North African Islamic empire in the middle ages.

In conclusion it was the access to education of rich white men in the 17th to 19th centuries that caused a lot of more modern scientific discoveries to be made and recorded by them.

Application task – You do

The Eurocentric view of science dominated by white men is wrong because...

Application task – You do

I believe the Eurocentric view of science dominated by white men is wrong because...

The first reason I think this is...

The second reason I think this is...

In conclusion...

Plenary

Name three places where significant progress in science has been made at times in history when European science was not as developed

China, India, North Africa, Middle East