

Technology and innovation in the Middle East

By WGBH, adapted by Newsela staff on 01.09.18

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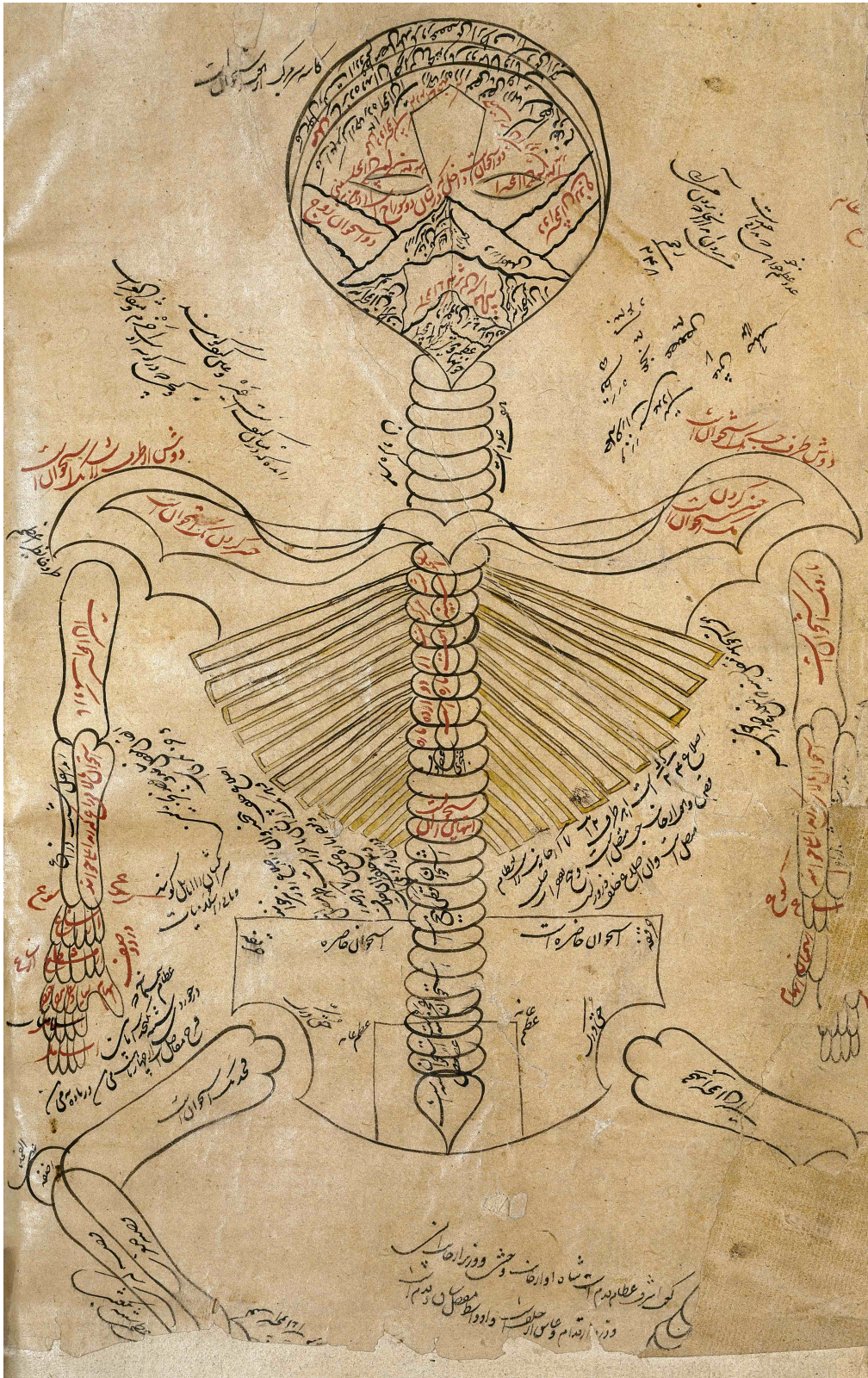
Level **610L**



Image 1. The stars of the Canis Major constellation on the Manuchihr Globe. The globe was made almost 400 years ago, under the orders of Manuchihr Khan, a ruler in the Middle East. Photo from the Adilnor Collection/Wikimedia

The religion of Islam started around 1,400 years ago. A person who follows Islam is called Muslim. For hundreds of years, Muslims made new discoveries in math and science. At the time, Muslim thinkers were far ahead of those in Europe.

In math, Muslims used the number zero before Europeans. Muslim astronomers studied the stars and planets. They also knew the Earth was round. This was 600 years before Galileo, the European astronomer. Galileo discovered that the Earth moved around the sun.



Ibn Sina was a Muslim thinker. He is also known as Avicenna in Europe. He lived around 1,100 years ago and was an expert in medicine. He wrote the "Canons of Medicine." These books explain how to treat many health problems. European doctors used these books for 700 years.

The West Catches Up

Things changed around 400 years ago. The Islamic world stopped exploring science as much as it used to. At the same time, Europe was going through the Industrial Revolution. It was making new inventions and building factories to make more goods. Europeans were using ideas they had learned from Muslims. Soon, Europeans had more powerful weapons. They also became richer than Middle Eastern countries.

Around 200 years ago, Middle Eastern countries decided to build railroads. They also wanted their cities to start using electricity. But they could not do this work themselves. They had to hire businesses from Europe.

Now, Europeans were making money in the Middle East. European governments got more involved with Middle Eastern governments. They wanted to make sure the money kept coming. But Middle Eastern countries began to dislike Europe's power. They thought it was hurting their freedom.

Technology And The Environment



Technology is often used to solve problems in the environment. For example, the Middle East is very dry. To get water, people in the country of Iran used ancient qanats. These were water channels that go underground. The qanats brought water from the mountains to the desert.

In Egypt, the Aswan dam was built 120 years ago. The dam was built to hold the water of the Nile River. This stopped the Nile from flooding too much.

Access To Technology Varies

Today, different technologies are used in different parts of the Middle East. The country of Israel is a leader in computer technology. In other parts of the Middle East, people hardly know about the Internet.



Mobile phones have gotten popular. Now, people in faraway regions can communicate. TV stations are also able to spread the news. One famous news station is Al-Jazeera, in the country of Qatar.

Some people are too poor to buy computers. So, Internet cafes have been built. These cafes have computers. Anyone can pay to use the Internet there.

Quiz

- 1 Which sentence from the article BEST states a MAIN idea of the entire article?
- (A) The religion of Islam started around 1,400 years ago.
 - (B) For hundreds of years, Muslims made new discoveries in math and science.
 - (C) But Middle Eastern countries began to dislike Europe's power.
 - (D) One famous news station is Al-Jazeera, in the country of Qatar.
- 2 Finish the sentence below.
- One MAIN idea of the article is that _____.
- (A) some parts of the Middle East today use more technology than other parts.
 - (B) Europeans stole ideas from Middle Eastern thinkers.
 - (C) technology now is much better than technology was 1,400 years ago.
 - (D) many people in the Middle East do not know what the Internet is.
- 3 If readers are looking for information on how the Middle East came up with ideas to fix problems with water, which section should they read?
- (A) Introduction [paragraphs 1-3]
 - (B) "The West Catches Up"
 - (C) "Technology And The Environment"
 - (D) "Access To Technology Varies"
- 4 What does the section "The West Catches Up" show the reader?
- (A) how the Middle East made more discoveries than Europe
 - (B) how railroads helped people in the Middle East
 - (C) how the Middle East came up with the idea for electricity
 - (D) how Europe began to do better in technology than the Middle East