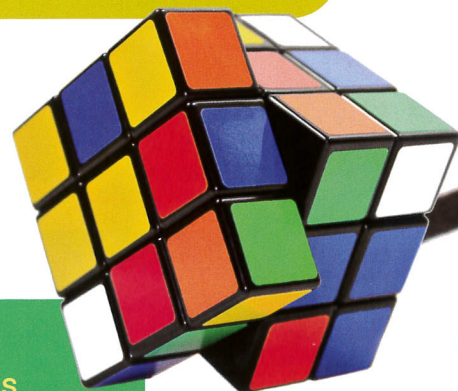


15 PUZZLING FACTS ABOUT GAMES

1 In 9th-century Baghdad three mathematicians—the **Banu Musa brothers**—invented ingenious trick devices and puzzles that were like the **Rubik's Cube** of their time.

2 More than **300 million** Rubik's Cubes have been sold worldwide. Stacked end to end, they would **stretch** from the North Pole to the South Pole!

3 The **record** for solving a Rubik's Cube is **6.24 seconds**.



The Banu Musa brothers built upon Greek knowledge and helped start the development of **mechanical technology**.



5 **Al-Biruni**, another scholar in the medieval Muslim world, wrote about **number puzzles**.

6 It took a few centuries for **Europe** to catch up with the innovative thinkers of Muslim civilization.

7 Like the Banu Musa brothers, many of the Muslim scholars studied at the **House of Wisdom**, a famous scientific academy in Baghdad founded in the 9th century.

Published around 850, the Banu Musa brothers' *Book of Ingenious Devices* illustrated more than **100 trick gadgets and machines**.



Sudoku, a modern version of a mind game



9 Some of the brothers' **funnier** trick devices involved fake animals and sounds and relied on water and air pressure, siphons, **valves**, and floats to make them work.

10 The brothers are credited with developing the earliest **robotic devices**, including birds that could sing and flap their wings.



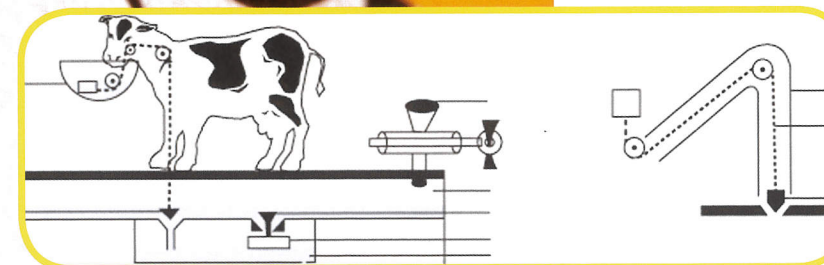
11 The Banu Musa brothers also are credited with creating the on-off switch and **the gas mask**.

12 The brothers' "**magic flask**" had two spouts that could be filled with different-color liquids. The liquids would mysteriously swap places inside the flask so the "wrong" color would come out of each spout.

13 The brothers' automatic **flute player**, which used steam to produce flute sounds, may be the world's first programmable machine—not that different from a **computer** you might program today.



14 These devices provided hours of **entertainment** and showed an incredible level of skill and craftsmanship.



15 The "**Drinking Bull**" featured a robotic bull that gave a contented sigh after drinking water.