

π Day: Celebrating the Endless Number [A2]

La giornata internazionale della matematica si celebra il 14 marzo, grazie a un gioco di parole alfanumerico. Si tratta di un'ottima occasione per promuovere questa disciplina tra i giovani.

Pi, represented by the **lowercase** version of the sixteenth letter of the Greek alphabet π, is an irrational number used **to measure** circles. Also known as the Archimedes constant, pi is the number you get when you divide the circumference of a circle by its diameter, using the mathematical formula $\pi(\pi) = \text{circumference} / \text{diameter}$. Pi is a mathematical constant, meaning that no matter how big or small the circle, pi is always the same.

REAL-WORLD USES

The first few digits of pi are 3.14, but pi is irrational because it has an infinite number of digits after the decimal point. While the calculation can be **traced back** thousands of years to the ancient Egyptians and Babylonians, the earliest known use of the Greek letter to represent it was in 1706 by the **Welsh** mathematician William Jones. Today, besides helping students calculate the size of a circle, pi is widely used by engineers, **builders** and computer scientists to design structures, make machines or study the stars. With increasing computational power, new **approaches** have been developed that have extended the decimal representation of π to many **trillions** of digits. This has **enabled** more sophisticated and precise calculations in fields such as quantum physics, music theory and medicine.

PI'S SPECIAL DAY

Every year on 14 March, pi is celebrated with a special event: Pi Day. Why this day? Simple: because some countries (like the US) write the date in the month/day format (MM/DD), so 14 March is written $\frac{3}{14}$ and these are the first three digits of pi: 3, 1, 4. Pi Day was founded in 1988 by Larry Shaw, a physicist who worked at the Exploratorium science museum in San Francisco.

His intention was **to encourage** children to take more interest in mathematics. This is now seen as more important than ever to address a high demand in STEM-related jobs (science, technology, engineering and mathematics), and to motivate more girls to study STEM subjects. As such, Pi Day is now a worldwide celebration and in 2019 **UNESCO** officially declared Pi Day the International Day of Mathematics.

CELEBRATIONS

There are many ways to celebrate Pi Day (which also, coincidentally, is Albert Einstein's birthday.) Some people, for example, **bake** and eat **pies** for an amusing reason: because the word 'pi' is pronounced exactly like 'pie'. Besides, **pies** usually have a circular shape! Some families even decorate their **pies** with the symbol for pi, and many pie restaurants offer discounts. Pi has also inspired a unique sport: pi memorisation, where competitors have to remember as many decimal numbers of pi as possible. A Japanese man memorised over a hundred thousand digits, and it took him sixteen hours and thirty minutes to recite them!

MATHS IS EVERYWHERE

Pi Day is also a great way to emphasise the importance of mathematics and encourage people to explore it in a different way. Mathematics is a part of everything we do. It is behind our computers, the apps on our smartphones, and our **GPS** searches to find places. Planning a **budget**, saving money, or paying **bills** all require basic maths **skills**, but maths also plays a role in art, music, medicine, space exploration and everyday life. Games too depend on mathematics, especially those that involve strategy: when playing **chess**, backgammon, or solving a Rubik's cube, we use maths to plan our moves. Even athletes use maths to improve their performance by analysing their speed, timing and strategies. So, maths is everywhere, and by learning and appreciating it, we can discover how it **shapes** our lives. Happy Pi Day!

Glossary

- **to measure** = misurare
- **traced back** = risalire a
- **GPS** = acronimo di Global Positioning System
- **lowercase** = minuscola
- **approaches** = approcci
- **bake** = cuocere al forno
- **pies** = torte
- **budget** = bilancio di previsione
- **skills** = competenze
- **chess** = scacchi
- **trillions** = bilione
- **enabled** = permettere
- **to encourage** = incentivare
- **UNESCO** = United Nations Educational, Scientific and Cultural Organization
- **bills** = fatture
- **shapes** = modellare
- **Welsh** = galles
- **builders** = costruttori