



## <u> John Nash – Mathematician</u>



From being credited for solving some of the most pressing mathematical and theoretical problems to battling mental illness, the remarkable journey of celebrated American mathematician John Nash serves as an inspiration to many.

With life swinging like a pendulum between genius, mental illness and celebrity status, Nash' incredible work in the field of Economics and Mathematics won him several laurels, including the Nobel Prize in 1994 for his research on game theory, the maths of decision-making and strategy and the Abel Prize in 2015.

Nash was born to John Forbes Nash, an electrical engineer, and Margaret Virginia Nash, a

schoolteacher, in Bluefield, West Virginia, on June 13, 1928. His parents were quick to realise that their son was special as he performed spectacularly well in academics, especially mathematics during his initial years of schooling. His parents encouraged him to get enrolled for advanced mathematics courses at a local community college during his final year of high school.

In 1948, 19-year-old Nash graduated with both a B.S. and M.S. in Mathematics. He was offered a scholarship by Princeton University, where he pursued higher studies in mathematics. It was here at Princeton, that he began working on his equilibrium theory, which later was known as the Nash equilibrium.

By 1959, Nash had reached the pinnacle of his career when he started showing signs of delusions and extreme paranoia. He feared that all men who wore red ties were part of a communist conspiracy against him. He was diagnosed with paranoid schizophrenia. Nash's world began crumbling before him and for the next two decades or so, the mathematical genius spent much of his time in hospitals.

The only constant for Nash during these testing times was his wife Alicia, who stood firmly by him, refusing to give up on her husband's serious condition. It took innumerable therapy





sittings and countless counseling sessions before Nash finally started to show signs of improvement and recovery.

In the late 1980s, Nash reappeared in academic circles, and in 1994 he was awarded the Nobel Memorial Prize in Economic Sciences for his work on game theory. The Nobel Prize and the 2001 film 'A Beautiful Mind', based on journalist Sylvia Nasar's book of the same name, recounting Nash's struggles and propelled him into the limelight.

The resolve that Nash demonstrated in his recovery from mental illness and his un-paralleled mathematical work is perceived by many as remarkable and inspirational for millions of those who perish before adversity.