

‘A Tribute to John Horton Conway’ – Glossary of terms

- [1] **Nim:** a two-person mathematical game; see <https://en.wikipedia.org/wiki/Nim>
- [2] **Dedekind cuts:** a method of constructing the real numbers from the rational numbers; see https://en.wikipedia.org/wiki/Dedekind_cut
- [3] **von Neumann ordinals:** a way of defining and extending the notion of natural number; see https://en.wikipedia.org/wiki/Ordinal_number#Von_Neumann_definition_of_ordinals
- [4] **Surreal numbers:** an extension of the notion of number, created by John Conway; see <https://www.cut-the-knot.org/WhatIs/Infinity/SurrealNumbers.shtml>
- [5] **Sprague-Grundy theory of impartial games:** a way of studying two-person combinatorial games with perfect information; see https://en.wikipedia.org/wiki/Sprague%E2%80%93Grundy_theorem
- [6] **John Conway’s Game of Life:** a zero-player game invented by John Conway, in which the entire future evolution of a game is decided by the initial state; see https://en.wikipedia.org/wiki/Conway%27s_Game_of_Life
- [7] **Sphere packing:** a study of the problem of packing spheres of identical size into a finite region, in an optimal manner; see https://en.wikipedia.org/wiki/Sphere_packing
- [8] **Knot theory:** a study of mathematical knots; see https://en.wikipedia.org/wiki/Knot_theory
- [9] **Leech lattice:** see https://en.wikipedia.org/wiki/Leech_lattice
- [10] **Conway Group:** see https://en.wikipedia.org/wiki/Conway_group
- [11] **Monstrous Moonshine:** see https://en.wikipedia.org/wiki/Monstrous_moonshine