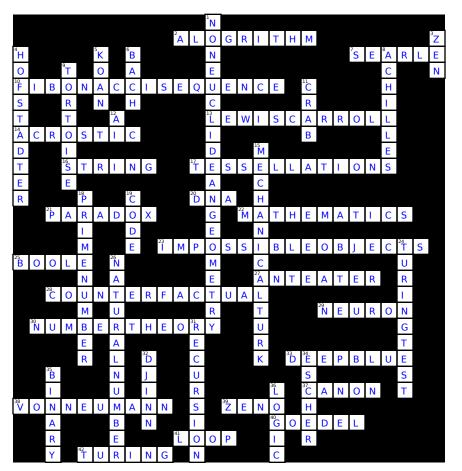
## The GEB Crossword **Eric Prichard**



Across

- Named after al-Khwarizmi, it is a step by step process for calculations 2
- Known for the "Chinese Room Problem." Famous sequence: 0 11 2 3 5 8 13 21....... Mathematician who wrote Alice in Wonderland. 10
- A poem where the first letter of each line spells out a 14
- word or phrase In computer science it is a series of characters serving as 16
- a literal constant or variale. In formal languages, it is a finite series of symbols taken from a set. Two dimensional planes created by using repeating and
- 17 non-overlapping geometric shapes. Often used in Islamic art
- 20 Self-replicating nucleic acid containing genetic
- instructions for all known life. A statement that seems to, but frequently does not, lead 21 to a contradiction.
- 22
- Field that studies such things as quantity, space, patterns, and the properties of numbers. Often incorporated by Escher, these objects can't exist in 23
- 25
- real life. Examples include the Penrose triangle and devil's tuning fork. 19th Century English logician, now considered the grandfather of Computer Science. Long nosed mammal known for eating ants and termites A statement about what would be the case if an untrue antercedent were true 28
- antecedent were true. An electrically excitable cell which is the basic unit of the 29 nervous systém
- 30
- Branch of mathematics devoted to study of integers Computer that defeated Gary Kasparov. A form of music where the melody is repeated at least 37
- once after a given number of bars. Bach and Pachelbel are known for theirs.
- Hungarian-American mathematician who was a founding 38 figure in modern computer science and wrote the unfinished "The Computer and the Brain"
- 39 Philosopher who allegedly claimed that motion is an allusion
- Logician famous for his incompleteness theorem 40
- In computer science, it is a statement that is specified one time, but carried out multiple times, often using 41 ecursion.
- Eccentric english mathematician who conceptually figured out how computers could manipulate symbols on a strip of tape using a table of rules. Committed suicide 42 by eating a poisoned apple.

Down

- Geometries based on axioms very similar to Euclid's, with the exception of their treatment of his "Parallel postulate." Examples include elliptic and hyperbolic geometries. Derived from the Chinese word Chan, which means meditation, this is a common form of buddhism. 1
- 3
- Cognitive scientist at Indiana University and "Author of Goedel, Escher, Bach" A story, riddle, or dialogue used by Zen monks during 4
- 5
- neditation to help them transcend by Zeimining 18 century German composer famous for his fugues like Toccata and Fugue in D minor. 6
- 8
- Greek warrior who killed Hector Defeated a haire in a race and showed that slow and steady can win
- 11 Ten legged crustacean whose legs are considered a delicacy. Abbreviation for term referring to the intelligence of
- 12 machines and the field of science that tries to improve and
- study it. Fake "automatan" that defeated Napoleon in chess. A 15
- chess master hid inside. Natural numbers greater than one and with no whole number divisor greater than one 18
- Quite simply, a way of converting information into a different form of representation. Often we want to "break" or "crack" them. 19
- Tests A.I. by determining whether a computer's response is distinguishable from a human's response 24
- 26 Ordinary whole numbers used for counting
- 31 A process of repeating items in a similar way. Often studied in computer science and mathematics.
- 32 Also known as genies, they are mythical beings from Islamic folklore
- Dutch artist famous for his tessellations and visual 34
- A way of representing computer instructions using only 0's 35 and
- 36 The formal study of reasoning