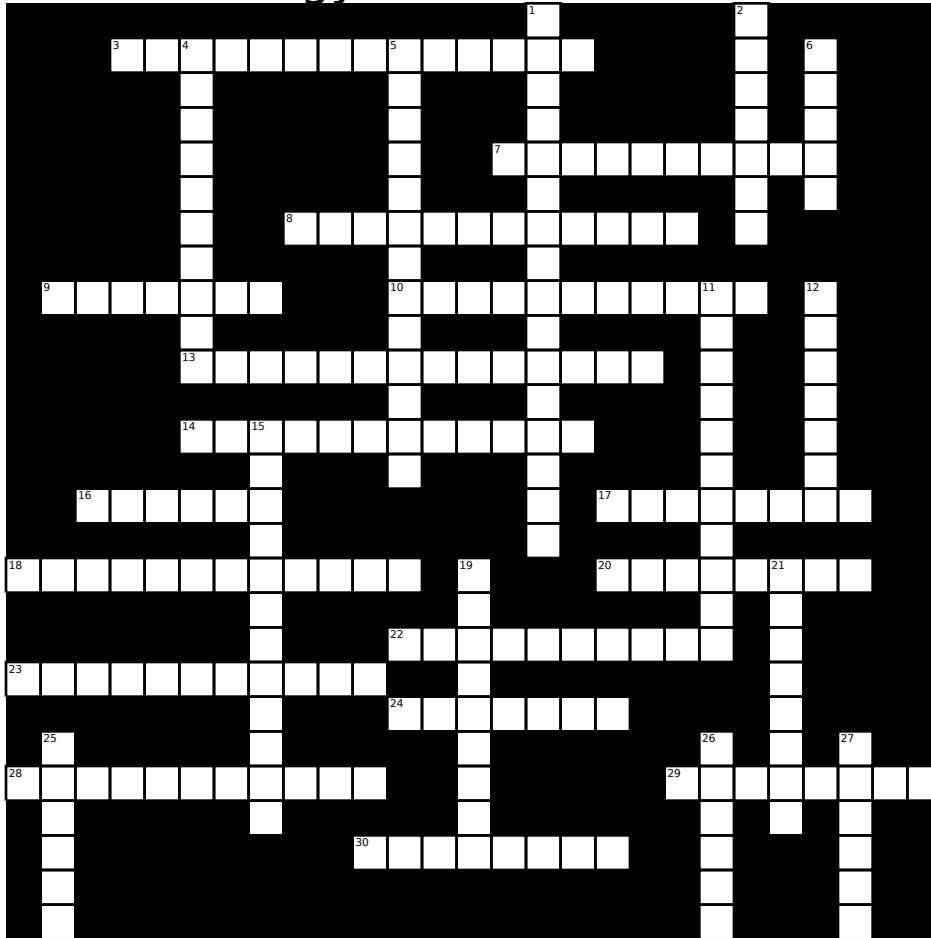


Unit 3 Engineering Design

Foundations of Technology 9th Grade



Across

- 3 Design problems are seldom presented in what form?
 7 when a product does not function as it did when it was new _____ obsolescence
 8 when an object, service or practice is no longer wanted even though it may still be in good working order
 9 A word referring to tolerances / Products should have a certain level of this
 10 The term for the process of making a product
 13 "What will it take to maintain the product?"
 14 Computers have greatly improved the power and use of mathematical models by performing _____ that are very long, very complicated, or repetitive
 16 Design is driven by _____ motive and market
 17 the systematic application of mathematical, scientific, and technical principals, that produces tangible end products that meet our needs and desires
 18 technological improvements are not introduced to a product, even though they could be _____ obsolescence
 20 Many years of formal post secondary education and is certified in a particular discipline
 22 4 Characteristics Involved in Engineering "Think ?"
 23 7 Resources used to create technology: machines & tools, people, energy, time, materials, capital
 24 the planned or calculated wearing down or breaking of a product so a new purchase will be required _____ obsolescence
 28 The term for taking care of or repairing a product
 29 Design is the result of goal-oriented _____
 30 a system used by the Romans to bring water into the city from a spring that is far from the city

Down

- 1 The ability to use what is available to solve a problem or develop a solution
 2 Designs must be continually checked, _____, and improved.
 4 the science of designing jobs, equipment, and workplaces to fit workers
 5 What is the term for a type of concern is when a product may harm a natural ecosystem?
 6 when a product is no longer desirable because it has gone out of the popular fashion, its style is obsolete _____ obsolescence
 11 Term for: how long is the product expected to last / how long should a product last
 12 Design requirements sometimes _____ with each other
 15 _____ modeling is to find a mathematical relationship that behaves in the same ways as the objects or processes under investigation
 19 The ability to see things in you mind
 21 No formal engineering education but still is capable of producing products to meet needs and desires
 25 What is a term for a type of concern when a product may cause harm to the user?
 26 _____ is the result of a formal, sequential process.
 27 a water delivery structure used by the ancient Romans / it resembles a bridge