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## PLTW Unit 4



## Across

3. A visual, mathematical, or three-dimensional representation in detail of an object or design, often smaller than the original.
4. When used in the context of design: the use of a computer to assist in the process of designing a part, circuit, building, etc.
5. A three-dimensional body or geometric figure.
6. A physical representation of an object. Prototypes and appearance models are physical models.
7. A manufacturing process that forces material through a shaped opening. 2. A modeling process that creates a three-dimensional form by defining a closed two-dimensional shape and a length.
8. Autodesk Pro file extension for a part
9. Autodesk Pro extension for a drawing.
10. The change in position of an object from its starting position to its final position. Displacement is described by a magnitude and direction. Displacement is a vector quantity.
11. A measure of how far an object has traveled from its starting point regardless of its starting or ending position. Distance is a scalar quantity.
12. Autodesk Pro extension for an assembly

## Down

1. The rate with respect to time that an object changes position (regardless of the path taken). Velocity is described by a magnitude and a direction. Velocity is a vector quantity.
2. The process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions.
3. A moving mechanical device that performs a repetitive function.
4. Turning around an axis or center point.
5. A machine part that receives motion from another part.
6. When used in the context of design: the use of a computer to assist in the process of designing a part, circuit, building, etc.
7. Autodesk Pro extension for a presentation.
8. A rotating or sliding part in a mechanism used especially to transform rotational motion to linear motion or vice versa.
