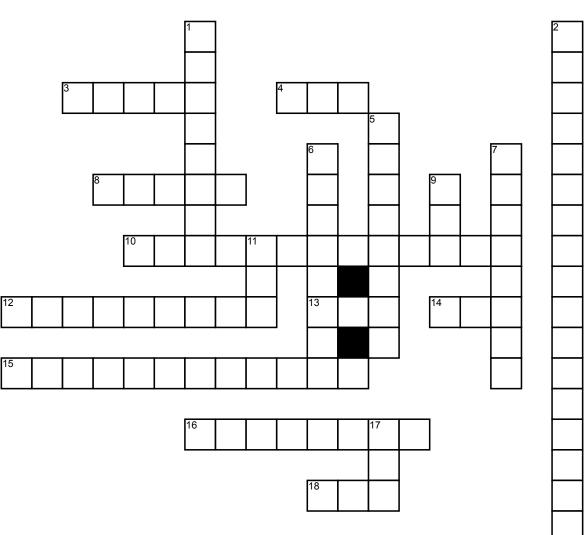
PLTW Unit 4



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.

8. A three-dimensional body or geometric figure.

10. A physical representation of an object. Prototypes and appearance models are physical models.

12. 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.

13. Autodesk Pro file extension for a part **14.** Autodesk Pro extension for a drawing.

15. 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.

16. 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.

18. Autodesk Pro extension for an assembly

<u>Down</u>

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.

 The process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions.
A moving mechanical device that

performs a repetitive function.

6. Turning around an axis or center point.

7. A machine part that receives motion from another part.

9. When used in the context of design: the use of a computer to assist in the process of designing a part, circuit, building, etc.

11. Autodesk Pro extension for a presentation.

17. A rotating or sliding part in a mechanism used especially to transform rotational motion to linear motion or vice versa.