

Student Name: \_\_\_\_\_

Unit No. **14****Part I.** Place the letter of the key term next to the correct definition.

Term	Definition
	A robot mechanism designed to pick up a large number of similar objects.
	Enables everyone in the design review team to view, print, measure, mark up, and revise 2D and 3D designs without the original design-creation software such as Autodesk Inventor.
	Something which carries the objects from the intake up into a storage chamber.
	The reduction in volume (causing an increase in pressure) of an object.
	Abbreviation for the Design Web Format file type.
	In addition to Autodesk Design Review, content saved with this file extension can be viewed in the Microsoft Vista operating system.
	Property enabling some objects/systems to overcome deformation and regain original shape and size when externally applied balanced forces are removed.
	Entrance area of an Accumulator for robotic object gathering.
	A single comment or a redline geometry correction inserted into a DWF file.

**A.** Intake    **B.** Elasticity    **C.** Conveyance    **D.** Markup    **E.** Accumulator  
**F.** Compression    **G.** DWFx    **H.** Autodesk Design Review (ADR)    **I.** DWF

**Part II.** Fill in the blanks.

An \_\_\_\_\_ is a robot mechanism designed to pick up a large number of similar objects. These mechanisms commonly utilize conveyor belts and rollers for their \_\_\_\_\_.

One component common in many accumulators is a \_\_\_\_\_ system that carries the objects from the intake up into a storage chamber. One simple version of this is a conveyor belt in front of a flat wall.

It is important to gear your accumulator appropriately. Ideally, the accumulator intake is geared so that it pulls an object in \_\_\_\_\_ than the drivetrain at max speed. In a single belt system, this means that the intake is geared in such a way that the linear belt speed is more than \_\_\_\_\_ the drivetrain's top speed. In a two belt system (see example), the intake's linear belt speed only needs to be more than the drivetrain's top speed.

For the belts or rollers to pull in an object, there must be some force pressing the belt onto the object. Often this force is caused by the compression or \_\_\_\_\_ of some part of the system.