Unit 3 Control Systems, Lesson 3.

- All fluid power systems have basic components and functions in common, including a reservoir or receiver, a pump or compressor, a valve, and a cylinder.
- Fluid power systems are designed to transmit force over great distances, multiply an input force, and/or increase the distance that an output will move.
- Laws about the behavior of fluid systems and standard conventions for calculating values within fluid systems aid in the design and understanding of such systems.
- Standard schematic symbols and conventions are used to communicate fluid power designs.

- Provide an overview of assignments that will be worked on throughout the lesson.
- Demonstrate expectations / skills.
- Provide instructions for *Project 3.2.1 Fluid Power Applications*.
- Review and provide access to the *Project 3.2.1 Fluid Power Applications Rubric*.
- Lead a class discussion via the teacher-led PowerPoint presentation called Fluid Power Introduction
- Provide access to the PowerPoint presentation called Fluid Power Applications Exemplar
- Provide instructions for *Activity 3.2.2 Pneumatic Demonstration*.
- Lead a class discussion via the teacher-led PowerPoint presentation called Pneumatic Power
- Provide copies of the *Activity 3.2.2 Pneumatic Demonstration Handout*.
- Provide instructions for *Activity 3.2.3 Hydraulic Demonstration*.
- Lead a class discussion via the teacher-led PowerPoint presentation called Hydraulic Power
- Provide copies of the *Activity 3.2.3 Hydraulic Demonstration Handout*.
- Provide instructions for *Activity 3.2.4 Fluid Power Practice Problems*.
- Assess student presentations/work.
- Provide instructions for the *Lesson 3.2 Test*.

Guided Practice

The teacher will:

- Review agenda, learning objectives, and essential questions daily.
- Lead students to recall prior knowledge / experience to make connections to new content.
- Introduce content to be learned.
- Clarify and check for understanding by asking open-ended questions (or by some other type of formative assessment) throughout instruction. R