Mechanical Systems Exercises

1. Mechanical systems have at least 3 parts, an input, a process and an output.
   Give three examples of inputs in a mechanical system.
   1. ___________________________
   2. ___________________________
   3. ___________________________

2. Mechanical systems have at least 3 parts, an input, a process and an output.
   Give three examples of mechanisms in a mechanical system.
   1. ___________________________
   2. ___________________________
   3. ___________________________

3. Describe 5 subsystems that are found on bicycles. Write your answers into the subsystems boxes.

4. Describe what the input, process and output is in the jigsaw system. Write your answers into the input, process and output text boxes.

5. Describe what the input, process and output is in the reciprocating sander system. Write your answers into the input, process and output text boxes.

Name:                                                                 Form:
6. Describe what the input, process and output is in the circular saw system. If the circular saw is used for long periods, the motor may overheat. **Show how “feedback” in the system could prevent the saw motor from overheating and damaging the saw.** Complete the diagram by writing your answers into the boxes.

![Circular Saw Diagram](image)

7. Describe what the input, process and output is in the wood lathe system. If one of the doors to the drive mechanism is opened, someone could get caught in the moving parts of the machine. **Show how “feedback” in the system could prevent the motor from running when one of the doors is open.** Complete the diagram by writing your answers into the boxes and drawing arrows correctly to connect the feedback to the rest of the system.

![Wood Lathe Diagram](image)