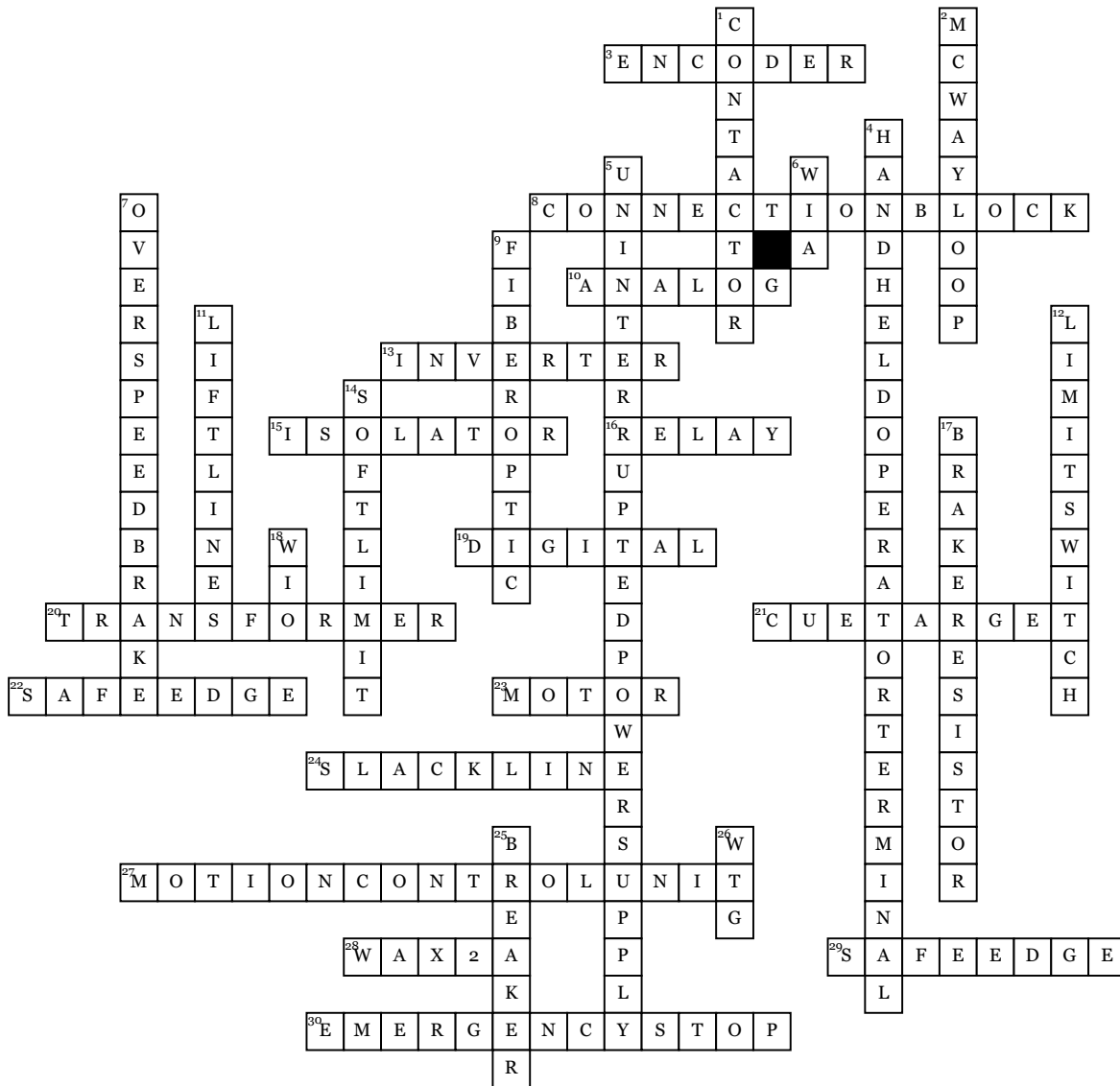


Name: _____

Automation - Mechatronics



Across

3. Used to measure positioning.
8. Feature copper or aluminum strips that help connect various electrical components.
10. Signal composed of continuous wave that keeps on changing over a time period.
13. An electronic device or circuitry that changes direct current (DC) to alternating current (AC).
15. Used to ensure that an electrical circuit is completely de-energized for service or maintenance.
16. Used where it is necessary to control a circuit by a separate low-power signal, or where several circuits must be controlled by one signal.
19. Signal that carries information in binary form.
20. A static electrical device that transfers electrical energy between two or more circuits.
21. Pre-programmed position for sequenced cues.
22. Device at pinch point used to terminate power to specified axis if activated.
23. Supplies motive power for a vehicle or for some other device with moving parts.

24. 24v. sensor used to detect excess movement in lift lines.

27. Stores all parameters in the Mechatronics system.
28. Converts analog signal to digital signal of the physical safety devices on the stage.
29. Device at pinch point used to terminate power to specified axis if activated.
30. Device used to terminate power to all stage axis.

Down

1. Designed to be directly connected to high-current load devices.
2. Signal flow in Mechatronics system that activates it components by fiber optics.
4. Used for digital operation on stage.
5. Provides emergency power to a load when the input power source or mains power fails.
6. Converts analog signal to digital signal of the joystick and brake paddles on the control desk.
7. The stopping of the braking clamp at predetermined rotational speed by speed responsive.

9. Allows signal to flow in a SKS system.

11. 5 of these make up an axis on a large class ship. Hint: FT needs a strong flashlight to inspect these.
12. Operated by the motion of a machine part or presence of an object.
14. Restriction on an axis in an operating system.
17. Used on AC variable frequency drives (VFD's) to dissipate energy that is produced in the motor as the drive provides braking torque to stop the motor.
18. Converts analog signal to digital signal of the traffic lights and DMS on the control desk.
25. Designed to protect an electrical circuit from damage caused by excess current from an overload or short circuit.
26. A group of these SKS cards are located in the MC rack and continue the signal flow to each individual rack.