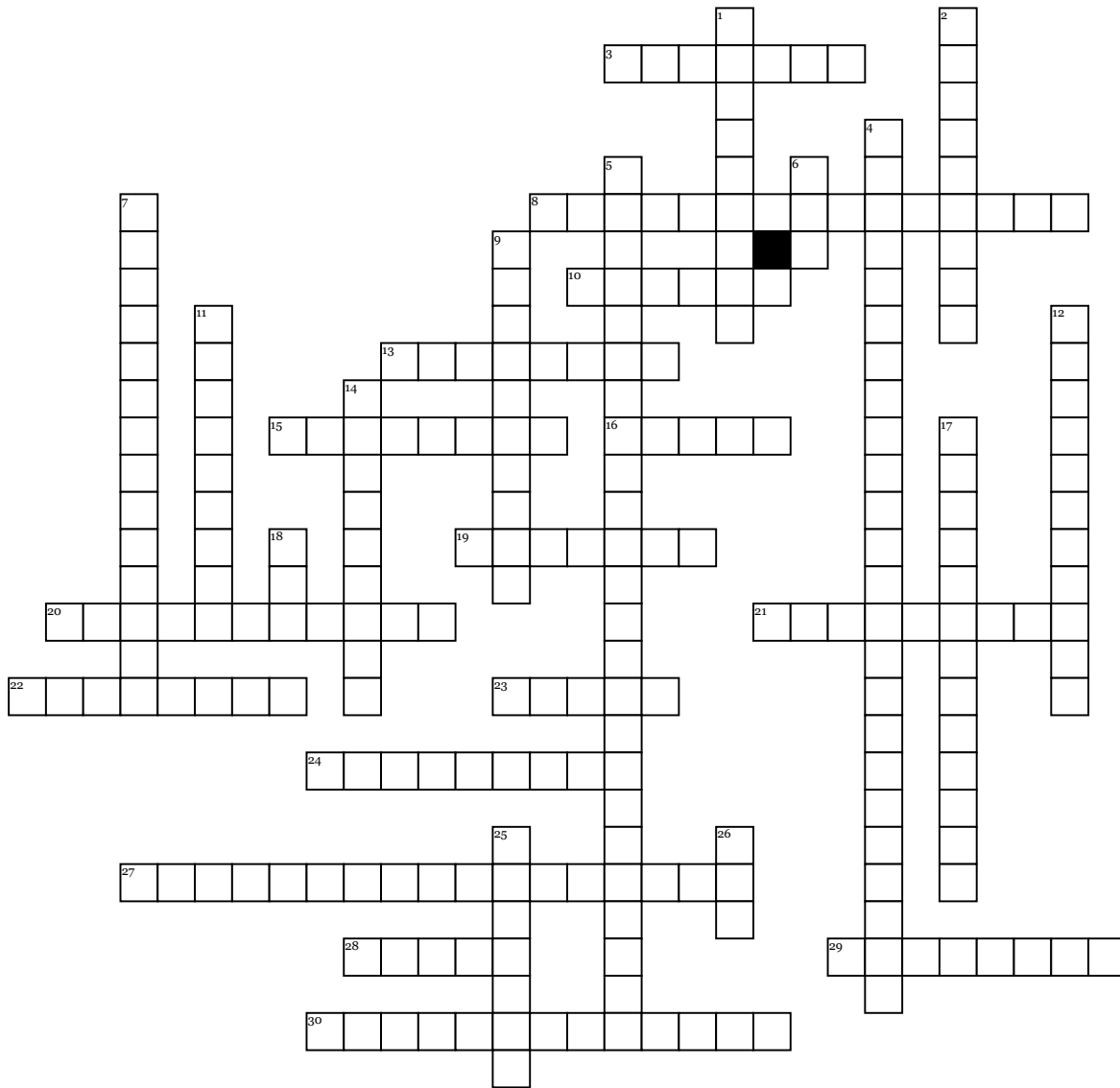


Name: _____

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 its 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.