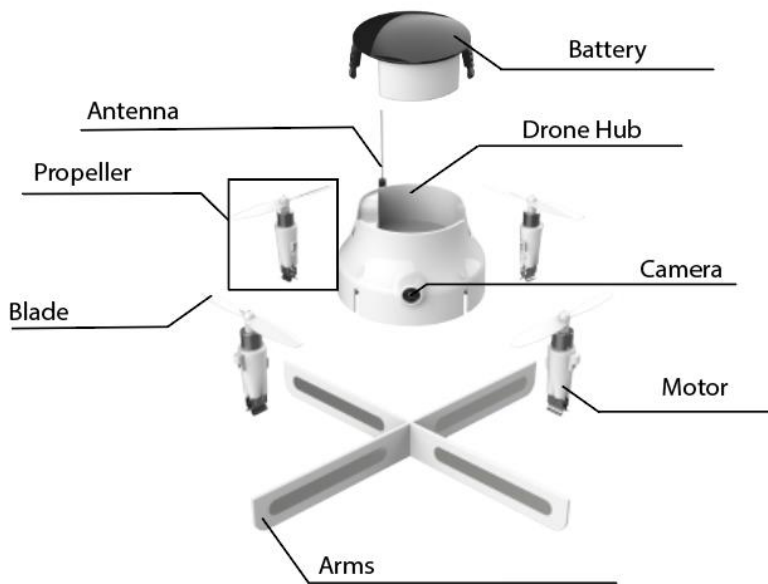




Name _____



Lesson 1: Parts of a Drone and Important Terms

- **Antenna:** allows for communication from the mobile app to the drone. An antenna receives radio waves that move through the air.
- **Arms:** the physical and electrical connection between the propellers and drone hub. The arms have a conductive layer of ink that allows for the flow of electricity to the motors.
- **Battery:** the power source for your drone. Your Circuit Scribe Drone's battery is

12.5V at 250mAh.

- **Blade:** the plastic blade is spun by the motor to push air down.
- **Camera:** gives you a bird's-eye view of what your drone can see in 480p. Can take in-flight pictures via the app.
- **Drone hub:** the command center for your drone. Houses all the drone circuitry, camera, battery, and antenna.
- **Motor:** the component that converts electrical energy into mechanical energy. The mechanical energy makes the blades rotate.
- **Propeller:** This component that forces air down and makes the drone fly. It is a combination of the motor and blade.

Vocabulary list

- **sUAS:** small unmanned aircraft systems. Your circuit scribe drone is considered a sUAS by the FAA
- **FAA:** Federal Aviation Administration. The government entity that oversees aviation regulations in the United States
- **RPM:** rotations per minute. An attribute of motors that describes how fast they spin. Your circuit scribe drone has motors that are capable of 15,000 rpm
- **Lift:** the force opposing gravity that is applied by the drone's motors
- **Newton's third law:** for every action, there is an equal and opposite reaction.
- **Angular momentum:** for every action, there is an equal and opposite reaction.
- **Free body diagram:** a diagram typically used in physics to show the relative magnitude and direction of all forces acting upon an object
- **Scalar:** describes a quantity having only magnitude, and not direction.