

Junior Solar Sprint

Glossary of Terms



- Aerodynamics** The resisting force that a moving object feels as it moves through the air.
- Alignment** When the suspension and steering systems are operating at their desired angles; the front tires should be positioned directly in front of the rear tires for the wheels to be properly aligned.
- Alternative energy** A form of energy derived from a natural source, such as the sun, wind, tides, or waves.
- Axle** Shaft on which a wheel can rotate.
- Bearings** Components in the wheel that allow the relative motion of two parts. They also support the axle with the wheels attached to it.
- Chassis** Part of a car that supports the body, wheels, and motor; main frame.
- Conductor** A material through which electricity flows easily.
- Current** Flow of electricity.
- Design process** The problem-solving process professional engineers use to create something new to perform a specific function.
- Friction** The resisting force between two materials that are in contact with each other.
- Gear** A wheel with teeth on the outer edge that transmits motion.
- Gear ratio** The ratio of the speed of rotation of the powered gear of a gear train to that of the final or driven gear.
- Guide wire** Thin wire attached to JSS cars to keep them from veering off the track.
- Lubrication** Substance used to help parts slide against each other.
- Motor** Uses the electrical energy provided by the solar panels in a solar car to create motion.
- Photovoltaic** Capable of producing a voltage when exposed to radiant energy, especially light.
- Solar cell** Converts sunlight into electrical energy.
- Steering** Mechanism that guides or controls the movement of a vehicle.
- STEM standards** Curriculum standards in the areas of Science, Technology, Engineering, and Mathematics.
- Torque** The turning effect of force on an object.
- Traction** Friction allowing movement; it transmits the force from a car's wheels to the road.
- Transmission** Any device that transmits mechanical power from one place to another; in a car the transmission connects the motor shaft to the wheel or axle.
- Voltage** Electrical energy that causes current to flow.
- Wheels** Circular part attached to the axle to allow the car to roll.