

JUNIOR SOLAR SPRINT | Glossary of Terms

| Term | Definition |
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| 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. |