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| I:\Cross Gates Primary\Cross Gates Primary LOGO.jpg  | **DT: Slingshot Car**  | **I:\Cross Gates Primary\Cross Gates Primary LOGO.jpg** |
| **Year Group: 4** | **Subject Focus: DT** | **Term: Autumn 2** |
| **Key Knowledge:*** To understand that all moving things have kinetic energy.
* To understand that kinetic energy is the energy that something (object/person) has by being in motion.
* To know that air resistance is the level of drag on an object as it is forced through the air.
* To understand that the shape of a moving object will affect how it moves due to air resistance.

**Which vehicle do you think has the least air resistance?** | **Technical Knowledge:** * Mechanisms are a system of parts that work together to create a motion.

* There is input and output in a mechanism.
* Axles help wheels to move a vehicle.

 Front ViewSide ViewBird’s-eye View | **Key words:**

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| Axel | A bar with wheels that turns |
| Chassis | The body of a car. |
| Air Resistance | The level of drag on an object as it is forced through the air. |
| Design | To make, draw or plan for something. |
| Slingshot | A Y-shaped toy used with an elastic band to shoot. |
| Function | The purpose of an object or how the product works. |
| Kinetic Energy | The energy that causes an object to move |
| Mechanism | The parts of an object that move together as part of a machine. |
| Net  | A flat 2D shape, that can become a 3D shape once assembled. |
| Structure | Something that has been made and put together and can usually stand on its own. |

. **Real life:**Did you know?Some of the first toy cars were made in 1901, that’s over 100 years ago! |

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