|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 View    Side View    Bird’s-eye View | **Key words:**   |  |  | | --- | --- | | 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! | |

?