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| **St Bartholomew’s Knowledge Organiser****Design Technology** | **Class 3** | **Summer 2 DT–** **Year 2021-2022** | ***Mechanical Systems*** |
| **What we will learn:** |  **Success Criteria:** |
| In this unit you will learn to;* know that all moving things have kinetic energy
* know that kinetic energy is the energy that something (an object or person) has by being in motion, eg: the energy that a swing has to keep on moving; any object in motion is using kinetic energy
* design a shape that reduces air resistance
* drawing a net to create a structure from
* choose shapes that increase or decrease the speed as a result of air resistance
* add graphics to personalise my design
* to make a model based on a chosen design
* to assemble and test my completed product
* to remember that smaller shapes create less air resistance and can move faster through the air
* to evaluate the speed of my design
 | * Designing a shape that is suitable for the project and making some attempt to reduce air resistance through the design of the shape
* Conducting the trial accurately and drawing conclusions and improvements from the results
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| **Important Vocabulary** |
| **Aesthetic – how a product or object looks****Air resistance – the level of drag on an object as it is forced through the air****Design criteria – to help designers to focus their ideas and test the success of them****Function – the purpose of an object, or how the object works****Graphics – images which are designed to explain or advertise something****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 becomes a 3D shape once assembled****Structure – something that has been made and put together and can usually stand on its own** |