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| Subject Area : Design & Technology |
| Year Group : 7 | Unit of Work : Race For The Line |
| Half Term :1, 2 and 317 weeks | Skills :* + - Understanding the function of packaging
		- Understand package suitability
		- Discover the key to aerodynamics
		- Demonstrate their design skills
		- Develop their team building skills by working in groups
		- Discover what constraints are and how as designers you will work with them
		- Demonstrate their ability to work as a team and make decisions based on a shared goal
		- Develop their ICT skills by using 2D design to create a profile stencil for their race car
		- Discover the importance of reducing friction
		- Demonstrate their practical skills by beginning to form their Styrofoam blocks
		- Develop their design skills by designing wheels for their race car using 2D design
		- Discover what an axle is and what function it has in their race car
		- Demonstrate their ability to work as a team
		- Develop their understanding of 3D CAM
		- Discover how efficient their race car, wheels and axles are by carrying out a test race
		- Demonstrate their learning by identifying areas on their race car to improve race performance
		- Develop their practical skills by designing or adding features to improve their race car
		- Discover what aesthetic features can be used to give their teams’ race car a winning edge
		- Demonstrate their design skills by creating aesthetic features for their race car
		- Develop their creative skills by getting their team’s race car Race Day ready!
		- Discover the importance of branding in motorsports
		- Demonstrate your learning by creating a ‘brand DNA’ in your teams
		- Develop your design skills by creating a logo design for your team
		- Discover the importance of an identity to racing car drivers in motorsports
		- Demonstrate your understanding of the properties of various textiles used in protective wear
		- Develop your design skills by creating a drivers’ uniform which incorporates the various smart/protective textiles and carries the teams’ brand DNA
		- Discover how keyrings are manufactured on mass in industry
		- Demonstrate your design skills by creating x6 design ideas for a Team Keyring
		- Develop your ability to work as a team by selecting a final design
		- Discover the properties of Acrylic
		- Demonstrate 2D Design skills by creating decal designs
		- Develop your understanding of 3D CAM by using the CNC Laser
		- Discover the use of decals in F1 racing
		- Demonstrate 2D Design skills by creating decal designs
		- Develop your understanding of 3D CAM by using the CNC Plotter
		- Discover how important some graphic products can be to advertise various sporting events
		- Demonstrate your understanding of key graphic principles
		- Develop your design skills by creating a Race Day poster for your team
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| Reasons behind order of topic in this half term |
| * Pupils complete a short unit of work based on the function of packaging. This work is revised to complete a baseline test at the start of the year.
* Pupils develop design skills and group work within the ‘Race for the Line’. The pupils then move onto the properties of modelling materials.
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| Subject Area : Design & Technology |
| Year Group : 7 | Unit of Work : Cotton Cushion Cover |
| Half Term :4, 5 and 618 weeks | Skills : * To understand the design and make task
* To discuss the importance of health and safety in the textiles room
* To locate the parts of the sewing machine
* To understand the term and method of resist dye
* To produce an interesting tie dye
* To understand how to gather relevant research
* To create design block print ideas
* To refer to your mood board for inspiration
* To describe your design ideas through annotation
* To learn how to produce a double turned hem
* To demonstrate safe use of the tools and equipment
* To create a neoprene block
* To understand how to block print
* To produce an accurate repeat block print
* To demonstrate how to produce a double turned hem
* To produce a double turned hem
* To demonstrate safe use of the tools and equipment
* To create a final design
* To construct cushion cover
* To produce an envelope back panel using the sewing machine
* To develop knowledge on cotton and fibres
* To demonstrate accurate machine sewing
* Learn how to evaluate a finished product
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| Reasons behind order of topic in this half term |
| * Pupils have gained an understanding of design. Pupils have the confidence to use ACCESSFM to design and construct their own product. Pupils have a better understanding of material properties.
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