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| How do wheels move? |  | Designing a vehicle |
| ●Wheels allow vehicles to move  ●Mechanisms make a toy or vehicle roll forwards (axle, wheel and axle holder)  ●In order for a wheel to move it must be attached to an axle  Friction motor - Wikipedia | Key questions to think about for your design:  How does a wheel work?  What do we need to make sure to guarantee our vehicles move?  What else do we need to consider for our vehicles? |
| Fixing Broken Wheels | Wacky Races |
| How do we know why it is not working?  We looks for the following –   1. Are the wheels prevented from turning 2. Has the wheel got an axle 3. Is the wheel circular 4. Is the axle holder attached to the body of the vehicle   Now what can you do to fix it? | Let’s see how well these veichles turned out!  Did you make a moving vehicle that worked?  Buy Make Your Own Vehicles D&amp;T Class Kit | TTS |

 Knowledge Organiser

Summer Term 2

**DT – Mechanisms: Wheels and Axles**

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| Vocabulary | |
| Axle | A rod or spindle passing through the center of a wheel. |
| Diagram | A simplified drawing showing the appearance, structure or workings of something. |
| Mechanism | A system of parts working together in a machine. |
| Wheel | A circular object that revolves on an axel and moves easily over the ground. |
| Axel Holder | The component through which the axle fits and rotates. |
| Equipment | The items needed to create something. |
| Chassis | The base frame of a car or wheeled vehicle. |
| Dowel | A peg used for holding together components of a structure. |