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| **What will we be learning?**  **Work**  High voltage with solid fill | **Why this? Why now?**  Previous Learning  Forces, Energy  Future Learning  Wave Properties, Heating & Cooling,  Enquiry Processes  Identify Variables, Collect Data, Present Data, Analyse Patterns, Draw Conclusions, Justify opinions and conclusions. | **Key Words:**  Work  Simple Machines  Lever  Gear  Pivot  Effort |
| **What will we learn?**   * How to label a lever with load, pivot and effort. * How to use the equation Work Done = Force x distance * How to carry out an experiment to show the relationship between distance from a pivot and force produced. * How to link the idea of the human arm as a lever and explain tendon attachment and force produced. * How to extrapolate a graph.   **Misconceptions in this topic**   * Some people think that energy can be lost or used up, energy is always conserved but may be transferred to a different energy store. | |
| **What opportunities are there for wider study?**  Careers - Engineer, Architect, Construction, Civil Engineering, Aviation, Automotive Engineer, Car mechanic, Production Engineer.  STE(A)M – For details of courses and opportunities look at:  <https://highcliffe.sharepoint.com/sites/LearnSTEM> | |
| **How will I be assessed?**  End of Topic Assessment | |