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| I:\Cross Gates Primary\Cross Gates Primary LOGO.jpg | **DT: Structures (creating a windmill)** | | | **I:\Cross Gates Primary\Cross Gates Primary LOGO.jpg** |
| **Year Group: 1** | **Subject Focus: DT** | **Term: Spring 2** |
| **Key facts:**   * Windmills can be used to grind grain into flour, to pump water or to produce electricity. * There is nearly 10,000 wind mills in the UK alone!     **We Are Learning To:**   * Design stable windmills that can stand on their own and catch the wind. * Evaluate our designs and discuss how we can improve them for next time. * Develop our problem solving skills and understand how a design can serve a purpose. | | **Technical Knowledge:**  A wind mill has an axel, similar to ones that cars use that help connect the sails and enable them to spin around with the wind.  Windmills need to have a rotor, which will help the sails to spin around.  Windmills need to have a strong structure to help the sails stay strong and not topple over.    **What will your windmill look like?** | **Key words:**   |  |  | | --- | --- | | Axle | A long straight piece of material that connects to a rotating part | | Evaluation | Looking at what is good and bad about something and thinking how to make it better | | Sail | The part that moves in the wind | | Stable | An object that does not topple over easily | | Test | To find out whether something works as it should | | Structure | Something that is built for a purpose | | Windmill | A structure with sails that moves by the wind | | Design | A plan to show the look and workings of a building | | Rotor Blades | The long airfoil that rotates | | Rotor | The rotating part of an electric machine, such as a generator. |   .  **Real life:**   * Daniel Halliday made the first windmill in 1854. * Daniel was an inventor, machinist and businessman. * Daniel was the first person to make a windmill move to face the direction of the wind. | |