

DT

Structures: constructing a windmill

Y1

What I should already know

- To know that a mechanism is the parts of an object that move together.
- To know that a slider mechanism moves an object from side to side.
- To know that a slider mechanism has a slider, slots, guides and an object.
- To know that bridges and guides are bits of card that purposefully restrict the movement of the slider.



Sticky Knowledge

That the sails or blades of a windmill are moved by the wind.

That windmills are used to generate power and were used for grinding flour.

That a structure is something built for a reason.

That stable structures do not topple.

That adding weight to the base of a structure can make it more stable.

Vocabulary

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|-----------------|---|
| Client | The person who you are designing something for. |
| Design | To make, draw or write plans for something. |
| Design Criteria | A set of rules to help you with your ideas and test the success of them. |
| Evaluation | When you look at the good and bad points of something, then you think about how you can improve it. |
| Net | A flat 2D shape, that can become a 3D shape once assembled. |
| Stable | Object that doesn't easily topple over |
| Strong | It doesn't break easily |
| Structure | Something that has been made and put together. For example, a building, bridge, chair or table. |

Technical skills

- Finding the middle of an object.
- Puncturing holes.
- Adding weight to a structure.
- Creating supporting structures.
- Cutting evenly and carefully.
- Evaluating and improving a product.

