

What I should already know: To use tools and equipment, scissors and glue correctly. To select and use simple tools to cut and join a range of materials.

Enquiry Questions

- Can we include individual preferences and requirements in our designs?
- Can we make a stable structure?
- Can we assemble the components of my structure?
- Can we evaluate our project and adapt our design?

Key Vocabulary

axle - the rod that goes right through the very center of the wheel to help it move and stay in place.
bridge - a structure that allows people and vehicles to cross over an open space.
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 about something, then think about how you could improve it.
model - a small exact copy of something.
net - a flat 2D shape that can become a 3D shape once assembled.
packaging - enclosing or protecting products for distribution, storage, sale, and use.
stable - object does not easily topple over.
strong - it doesn't break easily.
structure - something that has been made and put together. For example, a building, bridge, chair, table.
template - a form, mold or pattern used as a guide to make something.
test - to find out whether something works as it should.
unstable - not steady; not securely fixed.
weak - it breaks easily.
windmill - a structure with sails that are moved by wind.

National Curriculum

Pupils will:

Design

1)design purposeful, functional, appealing products for themselves and other users based on design criteria.

2)generate, develop, model, and communicate their ideas through talking, drawing, templates, mock - ups and, where appropriate, information and communication technology.

Make

1)select from and use a range of tools and equipment to perform practical tasks, e.g. cutting, shaping, joining and finishing.

2)select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

Evaluate

1)explore and evaluate a range of existing products.

2)evaluate their ideas and products

windmill axle - the point from which the turbine or sails move.

windmill structure - the part that makes the windmill stand up.

windmill turbine - the parts that move in the wind.

against design criteria.

The three main parts of a windmill:



Remember to think about what your client, the mouse, will like! He will be living in the windmill and will need to be happy.



There are lots of different types of windmill around Britain.

Have you seen any of these before?



Links to other areas of the curriculum : Literacy - Instructions