Mini Millers at Holgate Windmill

Welcome to the Holgate Windmill Challenge Badge!

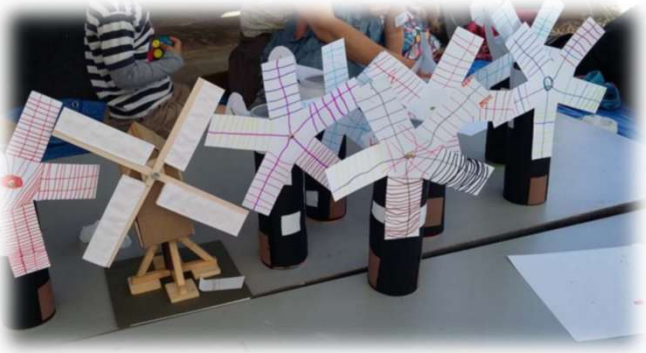
Holgate Windmill Challenge Badge

The Challenge Badge is split into four sections

1. Food & Baking

Time to get cooking and understanding ingredients!

Includes making bread, decorating buns and exploring where flour comes from.



2. Design & Technology

Try building your own windmill!

Includes making windmill models, discovering about weather and wind and how windmills work.

3. History & Art

See what you can discover!

Includes poem writing, visiting and researching the windmill, designing a poster or dressing up in historical costume.

4. Get Crafty!

Bring out your creative side!

Includes making salt dough models or corn dollies, creating a collage and making flour sculptures.

How to earn your badge

- **KS1, Rainbows & Beavers**
  Complete one activity from each section

- **KS2, Brownies & Cubs**
  Complete Two activities from each section

- **Above KS2, Guides & Scouts**
  Complete Two activities from each section and any two others

HOW TO ORDER YOUR BADGE

When you have completed your challenges, either visit us in the mill when we are open or email minimillers@holgatewindmill.org with photos or evidence of your achievements and to buy your badge. Badges cost £2 (+£1 postage, if required).

If you want, you can keep a record of your challenges below so you can remember what you have achieved.

Section	Activity	Date completed

Food & Baking

- Find out how flour is made.
- Sieve some wholemeal flour to separate the bran from the flour. How is the bran different to the flour?
- There are many different breads made daily in countries around the world. How many can you name and from which country do they originate?
- Make some flatbreads. A recipe is attached.
- Bake a loaf of bread or bread rolls- white or wholemeal. Why not try making a bread plait with the dough before baking?
  A recipe is attached.
- Decorate buns with windmill patterns.
- Create and decorate a breadmaking recipe card.

Design & Technology

- Make a spinning paper windmill using an online design
- Create a 3D model of Holgate Windmill- use junk modelling
- Find a picture of a wind turbine and compare it to Holgate Windmill. What are the similarities and differences?
- Design a kite, make and fly
- Find out how to measure wind speed and direction
- Design a pattern for a weather vane
- Find out about cogs and what they do-
  can you name any objects which use cogs?

History & Art

- Visit Holgate Windmill and learn about its history. When was it built and how has it changed since then?
- Write or perform a song or poem about a windmill
- Design a poster or leaflet that would encourage people to visit Holgate Windmill
- What other mills were in your local area?
    - Find out about their history and what they were used for
    - Find out what is there today
- Draw or paint a picture of Holgate Windmill- remember the five sails!
- Dress up in Georgian, Edwardian or Victorian style costume

Get Crafty!

- Make a salt dough sculpture e.g. a mouse, cat, windmill, owl, miller. A recipe is attached.
- Find out about corn dollies and make your own out of grain stems or grass. Is there a special pattern for your area?
- Create a collage of a windmill. Why not include food packaging, pasta or grain
- Make a sock cat or mouse
- Make and decorate a dial showing the parts of the compass
- Pour some flour into a tray and use it to make flour sculptures.

“Bob’s Favourite Loaf”
Wholemeal Bread Recipe

(Recipe taken from the Holgate Windmill Recipe book on sale in the mill)

This is a good basic loaf of bread. If you use 100% wholemeal flour, you will get a denser and stronger flavoured loaf.

Ingredients

300g Holgate Windmill wholemeal flour

200g strong white bread flour

5g dried yeast

10g salt

325g warm water

25g sunflower or olive oil

Method

Preheat oven to 250^{o} C/ Gas Mark 8.

Mix the flours together in a large mixing bowl. Add the yeast and salt. Combine the warm water and oil and pour into the flour. Work into a soft, smooth dough.

Knead the dough for about 10 minutes until it is stretchy and pliable.

Allow the dough to rise in a covered bowl. Leave for about two hours (the longer the better) until it is double the size.

Take it out of the bowl and knead it again.

Put it into a loaf tin, cover and leave to rise again for one hour. If you want, at this stage you can decorate the loaf with seeds and nuts.

Bake for around 30 minutes.

Flatbread Recipe- makes 6

Ingredients

1 mug self raising flour

1/4 mug Holgate Windmill wholemeal flour

1/2 teaspoon baking powder

1/2 mug natural yoghurt

Method

Mix all the ingredients together in a bowl and knead the dough for 1 minute.

Divide the dough into 6 equal sized pieces.

Roll each piece out to about 1cm thick.

Cook in a dry hot frying pan for 3 minutes each side.

Salt Dough recipe- not for eating!

Ingredients

1 mug Holgate Windmill wholemeal flour

1/2 mug table salt

1/2 mug water

Method

Mix the flour and salt in a large bowl. Add the water and stir until it comes together into a dough ball.

Transfer the dough to a floured work surface and then use your imagination to start creating your sculptures! When you have completed your sculpture or cut your shapes, wash your hands to remove the salt.

You can either oven dry or air dry your creations.

To air dry: Leave your items in a warmish place for 2-4 days. Turn the work over now and again so both surfaces can dry. Once the items are hard, they are ready to paint.

To oven dry: Put your items on a lined baking sheet and bake on the lowest oven setting possible until the items are solid. The drying time will vary depending on the thickness of your work- it could be around 3-4 hours. Leave to cool and then paint.