



The Journey of Wheat – From Field to Plate

Crofton Pumping Station is surrounded by fields of barley, beans, oats, and **wheat**.



Wheat starts as a seed and grows into a product we can eat and use in many ways every day.

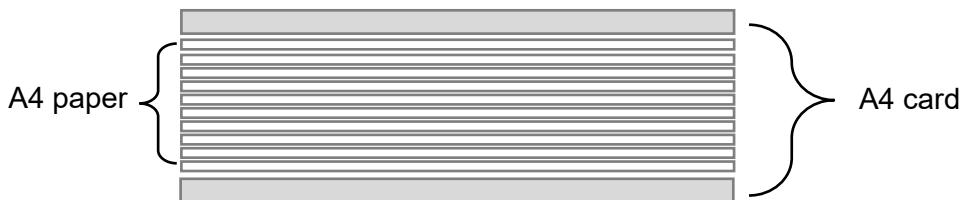
Complete the activity to follow the journey of wheat from field to plate.

You will need:

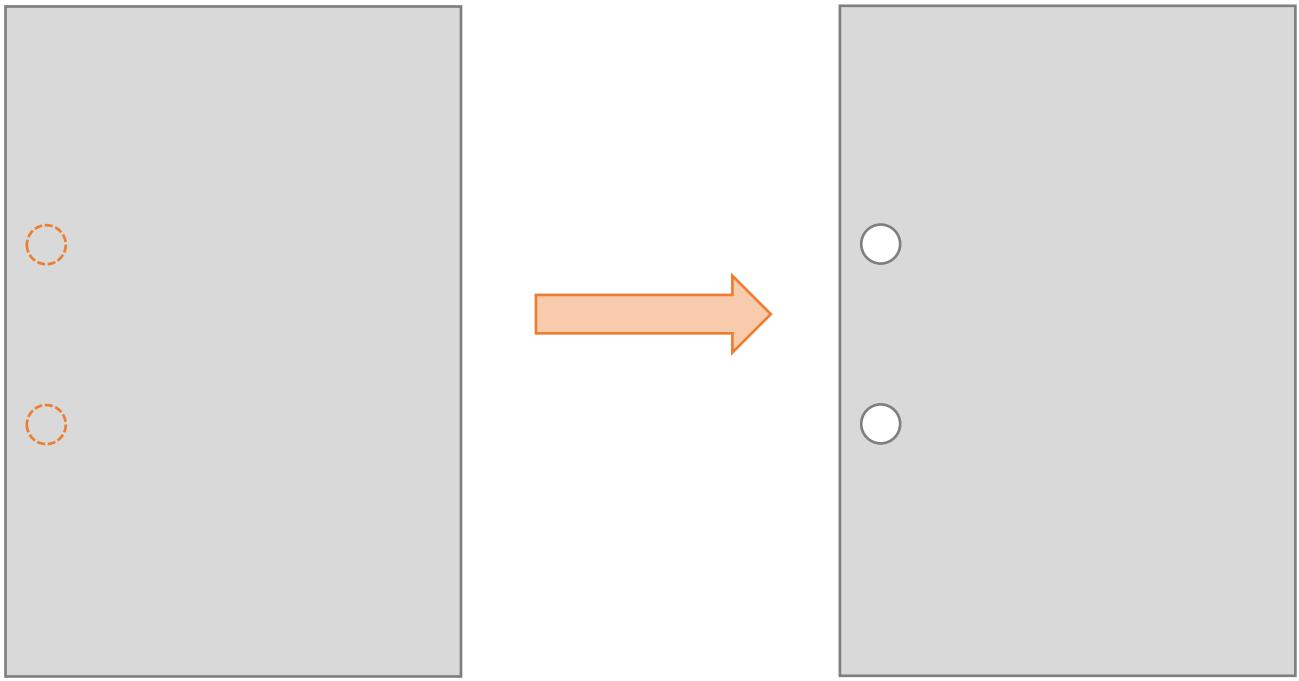
- The Journey of Wheat – Edible England instruction sheet
- Six sheets of A4 paper
- Two sheets of A4 card
- A hole-punch
- 30cm of string
- Scissors
- Glue
- coloured pens and/or pencils

Part A: Make Your Sketchbook

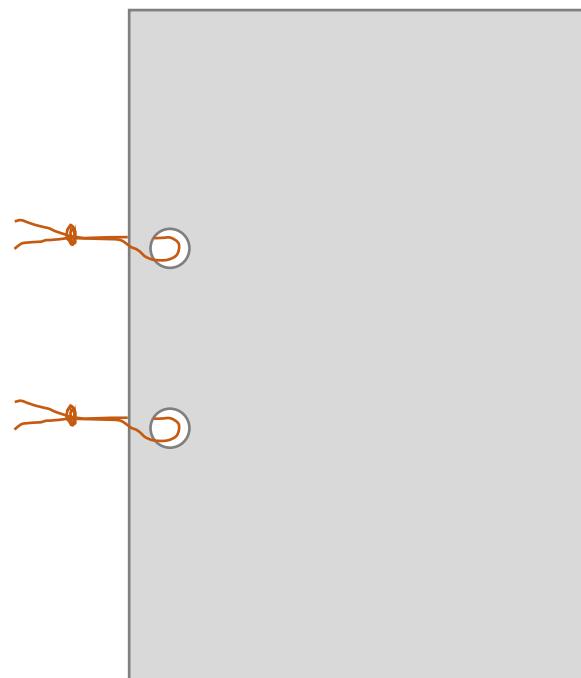
- 1) Use the two A4 card sheets to sandwich the six A4 sheets of paper together.



- 2) Use the hole-punch to make two holes on one side of the paper pile.



- 3) Cut the string in half. Thread each half through one hole and tie the ends loosely together. Too tight and the pages won't turn.



- 4) Your scrapbook is ready! Add a title and decoration to the cover.

Part B: Record the Journey

Cut out and stick each **step** into your scrapbook. Next, draw pictures for each step or do some research and print pictures off and stick them in.

Get creative!



The Journey of Wheat – From Field to Plate

Step 1: It all starts with seeds. Wheat seeds are sown into the soil in spring with a big machine called a **drill** which is pulled by a tractor.



Step 2: The soil is then **rolled** with a heavy machine called a **roll** to push the seeds in nice and tightly.



Step 3: With a little sunshine and rain the seeds **germinate** and start to push their way through the soil.



Step 4: Fertiliser and pesticides are **sprayed** onto the wheat to help it grow big and strong.

Some farms use natural pesticides and organic fertiliser instead, these are called organic farms. To reduce the impact on the environment, weeds that grow next to the crop can be pulled up by hand, this is called roguing.



Step 5: More sunshine and rain help the wheat to grow. As it becomes taller, the **head** of the plant can be seen.



Step 6: The wheat flowers. Bees and other insects **pollinate** the flowers. These will produce seeds called **grains** which will grow and ripen.



Step 7: As the crop begins to **turn**, it changes colour from green to golden yellow.



Step 8: When the crop is ready, **combine harvesters** are used to harvest the wheat. The machine cuts the plant, and separates the **stalk** (straw) from the **grain**.

The grain is moved from the combine harvester to a barn in large trailers. This job is called **grain carting**.



Step 9: The cut stalk is known as **straw**, and can be used in many ways.

Pick **one** use from the list below to show how straw can be used.

- bedding for animals
 - food for animals
 - protecting plants
-



Step 10: Wheat grains are most commonly used to make flour, but can be used in other ways too.

Pick **one** use from the list below to show how grain can be used.

- food for animals
 - seed to plant in another field
 - cooking
-



Step 11: The most common use for **wheat grain** is to make **flour**.

Flour is made in large modern **mills**, but in the past it was made using a **windmill** or **watermill**.

Wilton Windmill can be found two miles away from Crofton Beam Engines. It was built in 1821 as a **windmill** because the new Kennet and Avon Canal which Crofton Beam Engines keeps topped up with their water pumps, used all the water in the area.

The mill uses wheat grain from Wessex Mills in Wantage, and the flour is sold to their visitors and five local farm shops.

Cut out and stick the windmill drawing into your scrapbook and write the missing names of each floor in the correct box.

Remember to read the descriptions carefully.

Wilton Windmill

The Missing Floor
Names are:

Bin Floor

Spout Floor

Stone Floor

Sails

Four sails are turned by the wind. This turns a shaft with drives all the machinery in the mill

Cap

The cover to the top of the Windmill, protecting everything inside

Dust Floor

This is where all the gears and equipment live to make the mill work as the sails turn

This is where the grain is poured into **bins**. This is the start of the process

This is where the **Mill Stones** are. The grains are broken up and skinned here to find the flour inside. The stones then **grind** the flour.

The Gallery

Runs around the whole building. This is where the Millers would work on the sails.

Ground Floor

Sacks of fresh grain are stored here. When they are needed, they are pulled up by ropes through the floorboards.

The ground flour comes out of the **spout** here. It is then put in bags and sent to local shops.



Step 12: The final step. Flour is used to make lots of different foods.

- Cut and stick the plate into your scrapbook. Think of what you can make with flour and draw it on the plate.

