

From Soil to Sandwich (1) ‘Growing the Grains’

Recommended for KS2/KS3
Curriculum links: Science,
English, Maths



‘Hello, Eva here. My hubby, Sid, used to be the head miller at the Tide Mill. He was good at his job, but when it came to keeping the accounts straight, well, that were my job.

It is very important to record all the grain that comes into the Mill, and all the flour that goes out. So, I know a thing or two about the journey that wheat makes from a seed in the ground to a slice of bread, from Soil to Sandwich, as you might say.

If you’ve watched my ‘Growing the Grains’ video you’ll have seen that we mainly use wheat in the Tide Mill. Wheat is the most popular grain for making flour for bread’.

On the next few pages are some activities that will help you discover more about Wheat; how it grows, what it’s made up of and how much we used to get through.

A stylized illustration of a woman with a pink headscarf and a grey top. The headscarf has a black lace-like trim around the face opening and is tied in a bow at the chin. The woman has large, expressive green eyes and a neutral expression. The background is a simple gradient of green and white.

A sack of flour with a wooden spoon and a blue stamp that says "CREATE".

The diagram illustrates the life cycle of wheat in a circular flow. The stages are as follows:

- Stage 1:** A seedling with two leaves and a root system. A line points to an empty box.
- Stage 2:** A seedling with two leaves and a root system. A line points to an empty box.
- Stage 3:** A seedling with two leaves and a root system. A line points to an empty box.
- Stage 4:** A seedling with two leaves and a root system. A line points to an empty box.
- Stage 5:** A seedling with two leaves and a root system. A line points to an empty box.
- Stage 6:** A seedling with two leaves and a root system. A line points to an empty box.
- Stage 7:** A seedling with two leaves and a root system. A line points to an empty box.
- Stage 8:** A seedling with two leaves and a root system. A line points to an empty box.

Arrows indicate the progression from one stage to the next in a clockwise direction.

Pollination, Germination, Flowers, Seedling, Shoot, Root, Seed, Ripening, Harvesting



‘As you’ve already heard I was responsible for recording how much grain came into the Mill. I used to record it all very carefully in the Mill’s log book. Take a look at this excerpt and see how much you can learn from it by answering the questions below. You may need to use my conversion chart to help!’



Summary Wheat Yr 1895-96			£	s	d
3943	3	March	2186	10	7
1887	3	April	1118	11	9
2752	2	May	1694	5	9
2507	1	June	1771	11	5
2032	2	July	1279	13	9
1338	1	August	836	10	6
1519	1	September	983	8	8
2971	7	October	1948	6	10
1107	3	November	784	2	4
2915	1	December	1853	8	1
1827	—	January	1264	14	4
3215	3	February	2193	—	5
28,015	1		£17,916	4	5

Conversion Chart (1895-2020)

1 pound (£) = £100
1 Shilling (s) = £5
1 Penny (d) = £0.42

What Year/s is this record page for?

The columns on the left are not headed. What do you think those numbers mean? (The Mill’s big balance scales are a clue).

The columns on the right show the value of the grain milled each month in pounds, shillings & pence. Which month was the busiest?

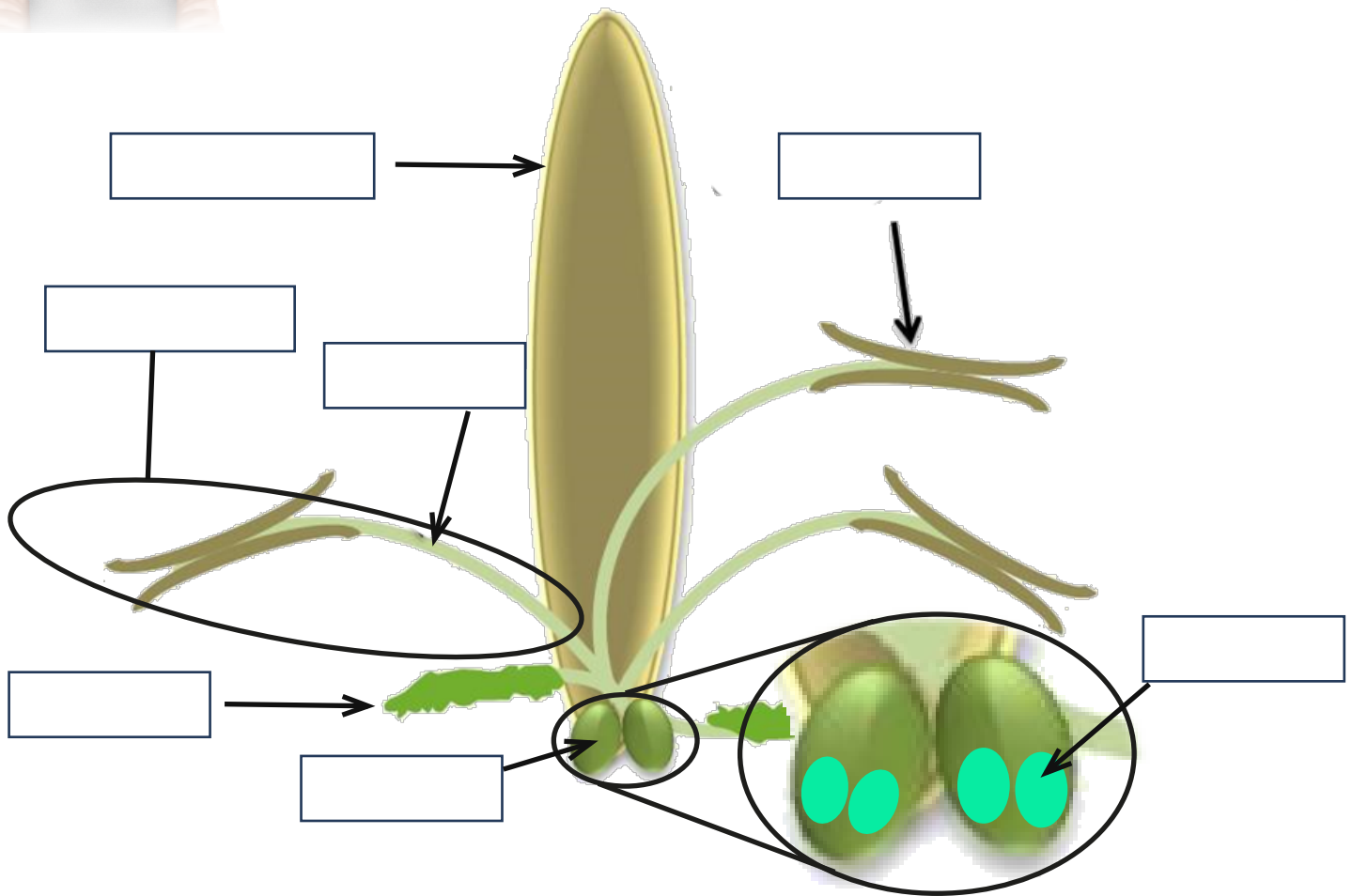
What was the total value of wheat milled in the first three months (Mar/Apr/May)?

The total value of milled grain was just over £17,900 in the year that the record was made. Using the conversion table, what is the equivalent in today’s money?



'Wheat goes through a life cycle much like any other plant. Using what you discovered in the video, give each stage a title using the word bank.'

'Then, using the large copy of this diagram at the back of this worksheet, draw or write what is happening at each stage.'



Wheat Flower Structure	Function
Stamen	
Stigma	
Ovary	
Filament	
Ovules	
Lemma	
Antler	

