



Stage 3: Conducting market research

Learning Objectives:

- To design and conduct a survey
- To present data in a pictogram

Stage Overview:

In this stage, the children are introduced to the idea of market research as an engaging and meaningful context for Maths learning. Through this, they learn how to design a simple survey to understand their potential customers' preferences and construct a pictogram to display their findings. They then work as a group to come to a final decision about which flavour of bread/flatbread their business should make.

Materials needed:

- Tally chart template
- Squared paper
- Recipe books/ access to the internet
- Bar chart template for extension

Presentation notes:

Slide 2: Introduction to market research	<ul style="list-style-type: none">- Display the power point slides and use questioning to introduce market research and how we can use it to help us decide which additional flavours we should add to our herb bread.- Explain that we are going to conduct a survey and record our results using a tally chart. To do this we simply ask lots of people who we want to buy our product which of our flavour ideas they prefer. By asking our customers what they would prefer, we can make a product that they are more likely to buy and be happy with.- To display our results, we will learn all about pictograms.
Slide 3: Types of question	<ul style="list-style-type: none">- Explain that for this survey, we need to ask a closed multiple choice question. This means that we will offer a small range of bread flavour options and ask participants to choose the option they would like the most. This will tell us whether people will want to buy our product or not.

Slide 4: Thinking about flavour	<ul style="list-style-type: none"> - In mixed-ability business groups, ask the children to think of three flavours they could add to their bread/ flatbread dough with the herbs that they are growing. - Give them some ideas to get them started e.g. basil would work with tomatoes and parsley would work with onion or lemon. - They may like to use recipe books or the internet to research which flavours work together or they could invent a completely new flavour combination.
Slide 5: Maths with meaning	<ul style="list-style-type: none"> - Once they have decided on their flavours, ask the business groups to write down their research question(s) e.g. what is the most popular bread flavour in Year 3/ KS2/ our school? - You might like to extend the children to ask a second question about the factors that would affect their buying behaviour e.g. price, fair trade, local produce, supporting British farmers
Slide 6: Tally charts	<ul style="list-style-type: none"> - The children should draw a tally chart to record their findings before collecting their data (or use the tally chart template). - Revise year 2 learning and model how to record their results in a tally chart using the power point.
Practical activity: Collecting data	<ul style="list-style-type: none"> - Give children the opportunity to collect answers from as many children as possible from a range of year groups. - Allow time for group members to feedback their findings and draw conclusions about the most popular flavour with their target customers.
Slide 7: Pictogram revision/ chocolate bar challenge	<ul style="list-style-type: none"> - Revise Year 2 learning by asking the children to write a list of top tips for drawing pictograms. This could be completed as a chocolate bar challenge activity: each child has a plain piece of paper which they fold into 6 segments. They fill one of the segments with an idea of their own and then walk around the room to collect answers from their peers until the remaining segments are full and they have 6 different top tips for drawing pictograms.
Slide 8: Drawing a pictogram	<ul style="list-style-type: none"> - Share the power point to talk the children through each stage of drawing a pictogram and share top tips for drawing one. - Model each step of how to construct a pictogram. - Ask the children to construct a pictogram to display their market research results. - You could extend them here by also covering how to draw an additional bar chart.
Slide 9: Decision time and shopping lists	<ul style="list-style-type: none"> - Ask the children to come to a final decision about what flavour their bread will be. - Ask the children to write two sentences to explain what their market research showed and the final decision their group came to. - At the end of the lesson, the children should write a shopping list for the additional flavouring ingredients they wish to add to their dough and give it to their teacher.

Links to the National Curriculum:

Subject	Topic	Objective
Design and Technology	Design	<ul style="list-style-type: none">- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or group
	Cooking and nutrition	<ul style="list-style-type: none">- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
Maths	Statistics	<ul style="list-style-type: none">- Interpret and present data using bar charts, pictograms and tables