Freda's Tea Stall
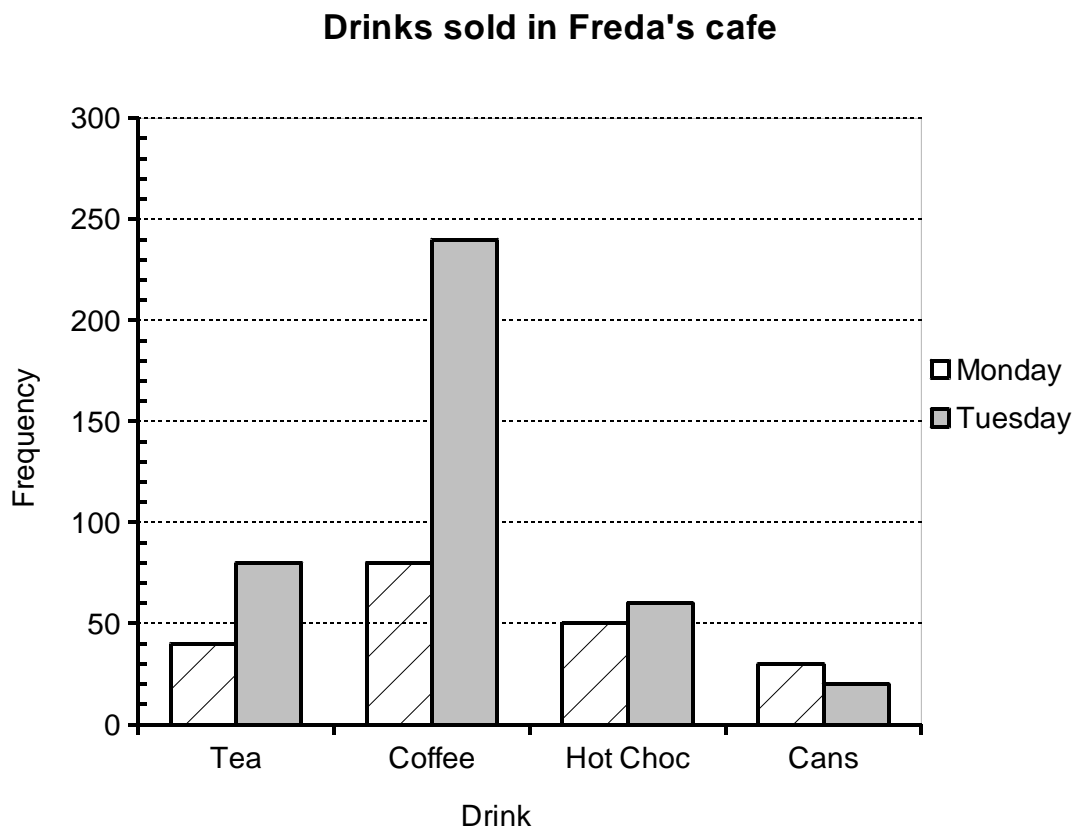
Name _____ Date _____

Freda runs a tea stall in a market.

She has collected figures about drinks sold on Monday and Tuesday one week.

One of her diagrams is shown below.

Drinks sold in Freda's cafe

Write down three different things this chart tells you.

Write full sentences.

Try to use some mathematical words like; *proportion*, *ratio*, *fraction*, *total*, *percentage*, approximately, larger, smaller.

Try to be as precise as you can.
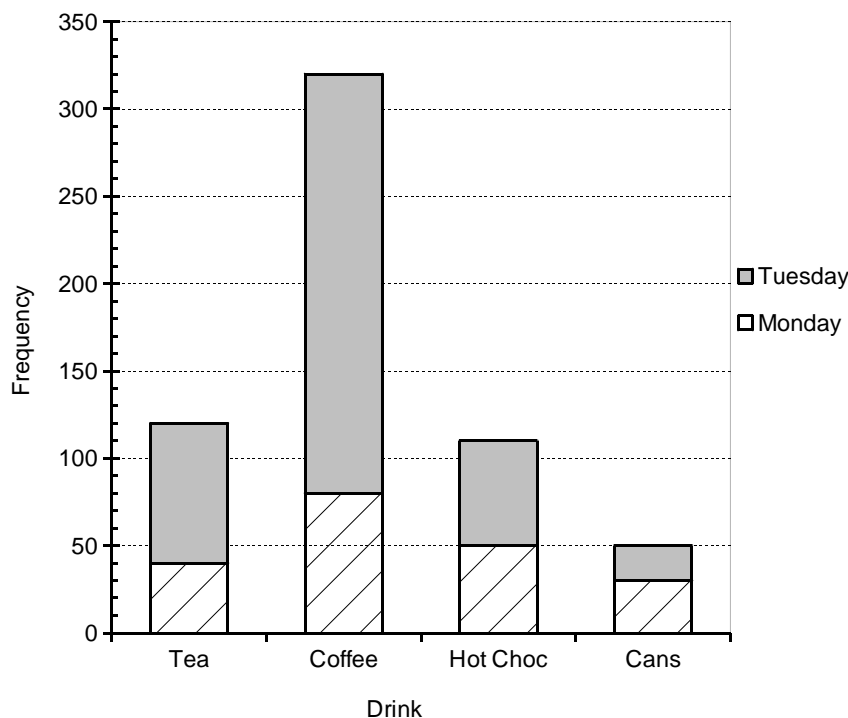
Freda's Tea Stall

Name _____ Date _____

Freda runs a tea stall in a market.

She has collected figures about drinks sold on Monday and Tuesday one week.

One of her diagrams is shown below.

Drinks sold in Freda's cafe

Write down three different things this chart tells you.

Write full sentences.

Try to use some mathematical words like; *proportion*, *ratio*, *fraction*, *total*, *percentage*, approximately, larger, smaller.

Try to be as precise as you can.

Freda's Tea Stall

Name _____ Date _____

Freda runs a tea stall in a market.

She has collected figures about drinks sold on Monday and Tuesday one week.

One of her diagrams is shown below.

Drinks sold in Freda's cafe

Write down three different things this chart tells you.

Write full sentences.

Try to use some mathematical words like; *proportion*, *ratio*, *fraction*, *total*, *percentage*, approximately, larger, smaller.

Try to be as precise as you can.

Freda's Tea Stall

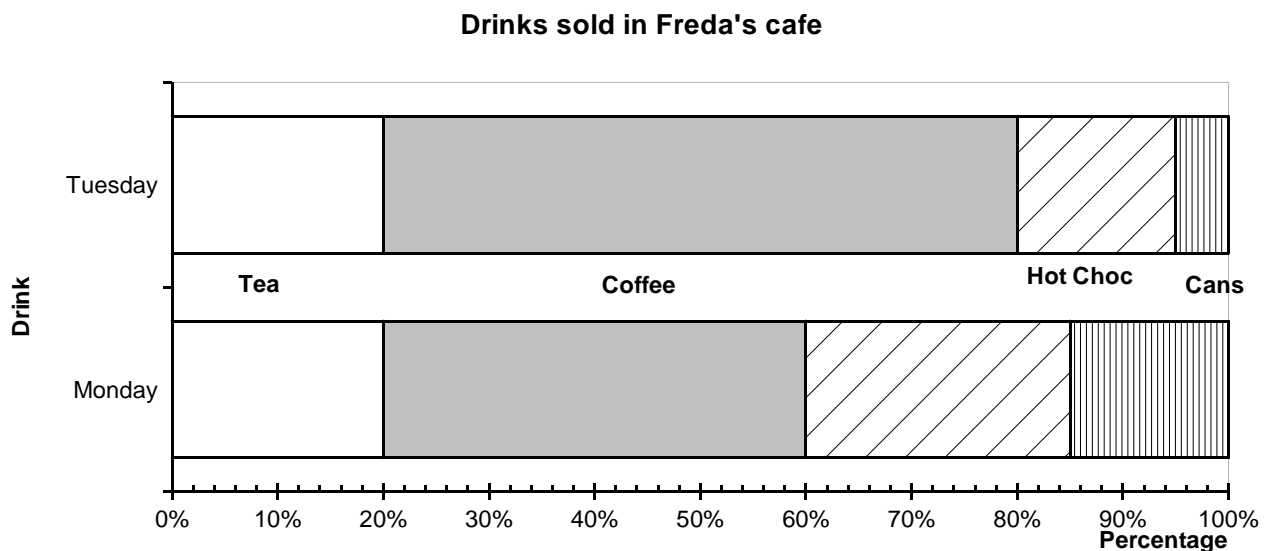Name _____ Date _____

Freda runs a tea stall in a market.

She has collected figures about drinks sold on Monday and Tuesday one week.

Freda's table is shown below...

Drink	Number sold Monday	Number sold Tuesday
Tea	40	80
Coffee	80	240
Hot Chocolate	50	60
Cold cans	30	20

Write down three different things this table tells you.

Write full sentences.

Try to use some mathematical words like; *proportion*, *ratio*, *fraction*, *total*, *percentage*, approximately, larger, smaller.

Try to be as precise as you can.

Freda's Tea Stall
Curriculum mapping and teaching notes

Pages 1-3 contain a chart and a brief to a group of students to discuss and write some sentences saying what the chart tells them. The twist is that each group of 3 students has a different chart drawn from the same data as the groups next to them. The fourth page has the table from which the charts were drawn.

The charts used are: dual/clustered bar chart comparing types of drink sold on two days. A stacked/composite bar chart and a percentage bar chart of the same data.

The context (drinks sold at a tea stall in a local market, simulated data) was chosen to be comprehensible by students from a wide range of ages and backgrounds.

Can be used at L1, L2 Functional Skills Maths and for GCSE Foundation Maths depending on the response you coach from the students.

FUNCTIONAL MATHEMATICS Coverage and Range statements (indicative only)

Coverage and range statements provide an indication of the type of mathematical content candidates are expected to apply in functional contexts. Relevant content can also be drawn from equivalent National Curriculum levels and the Adult Numeracy standards. ✓ = *main coverage and range skills covered in this resource. Exact coverage will vary with each student group and with how the teacher uses the resource.* ==However, in Functional Mathematics exams, it is the **process skills** that are assessed (see page 7) and they should always be stressed and developed during mathematics teaching and learning.==

Level 1

a) Understand and use whole numbers and understand negative nos. in practical contexts	g) Solve problems requiring calculation, with common measures, including money, time, length, weight, capacity and temperature
b) Add, subtract, multiply and divide whole numbers using a range of strategies	h) Convert units of measure in the same system
c) Understand and use equivalences between common fractions, decimals and percentages	i) Work out areas and perimeters in practical situations
d) Add and subtract decimals up to two decimal places	j) Construct geometric diagrams, models and shapes
e) Solve simple problems involving ratio, where one number is a multiple of the other	k) Extract and interpret information from tables, diagrams, charts and graphs ✓
f) Use simple formulae expressed in words for one- or two-step operations	l) Collect and record discrete data and organise and represent information in different ways
	m) Find mean and range
	n) Use data to assess the likelihood of an outcome

Level 2

a) understand and use positive and negative numbers of any size in practical contexts	g) find area, perimeter and volume of common shapes
b) carry out calculations with numbers of any size in practical contexts, to a given number of decimal places	h) use, convert and calculate using metric and, where appropriate, imperial measures
c) understand, use and calculate ratio and proportion, including problems involving scale	i) collect and represent discrete and continuous data, using information and communication technology (ICT) where appropriate
d) understand and use equivalences between fractions, decimals and percentages	j) use and interpret statistical measures, tables and diagrams, for discrete and continuous data, using ICT where appropriate. ✓
e) understand and use simple formulae and equations involving one or two operations	k) use statistical methods to investigate situations ✓
f) recognise and use 2D representations of 3D objects	l) use probability to assess the likelihood of an outcome

---

References: Ofqual (2009), *Functional Skills criteria for Mathematics: Entry 1, Entry 2, Entry 3, level 1 and level 2.* http://www2.ofqual.gov.uk/downloads/category/68-functional-skills-subject-criteria
This resource also covers many **adult numeracy** http://www.excellencegateway.org.uk/sflcurriculum elements. For related resources and curriculum links please visit the download page for this resource at www.skillsworkshop.org

Freda's Tea Stall Curriculum mapping and teaching notes

FUNCTIONAL MATHEMATICS PROCESS SKILLS and SKILL STANDARDS (SS)

Skillsworkshop tips
✓ = tip that works particularly well with this resource

Process Skills (all levels)	Entry 3 SS	Level 1 SS	Level 2 SS	To develop this skill, encourage learners to:
Representing *Selecting the mathematics and information to model a situation*				**Represent**
■ Recognise that a situation has aspects that can be represented using mathematics ■ Make an initial model of a situation using suitable forms of representation ■ Decide on the methods, operations and tools, including ICT, to use in a situation ■ Select the mathematical information to use	- Understand practical problems in familiar contexts and situations - Begin to develop own strategies for solving simple problems - Select mathematics to obtain answers to simple given practical problems that are clear and routine	- Understand practical problems in familiar and unfamiliar contexts and situations, some of which are non-routine - Identify and obtain necessary information to tackle the problem - Select mathematics in an organised way to find solutions	- Understand routine and non-routine problems in familiar and unfamiliar contexts and situations - Identify the situation or problems and identify the mathematical methods needed to solve them - Choose from a range of mathematics to find solutions	■ Highlight information they need and/or cross out unneeded information. ■ Arrange or reorganise given or selected information as needed e.g. in a table or list. ✓ ■ Show all their working out. Note that calculators are permitted at all levels of Functional Maths assessment but learners should get into the habit of recording all their working out – whether or not a calculator is used.
Analysing *Processing and using mathematics*				**Analyse**
■ Use appropriate mathematical procedures ■ Examine patterns and relationships ■ Change values and assumptions or adjust relationships to see the effects on answers in models ■ Find results and solutions	- Apply mathematics to obtain answers to simple given practical problems that are clear and routine - Use simple checking procedures	- Apply mathematics in an organised way to find solutions to straightforward practical problems for different purposes - Use appropriate checking procedures at each stage	- Apply a range of mathematics to find solutions - Use appropriate checking procedures and evaluate their effectiveness at each stage	■ Check all their calculations or procedures and show proof that they have done so. ■ Investigate other options / situations (e.g. research other graphical options). ✓ ■ Create new questions about given information and try them out on others. ✓ ■ Mark each other's work.
Interpreting *Interpreting and communicating the results of the analysis*				**Interpret**
■ Interpret results and solutions ■ Draw conclusions in light of situations ■ Consider the appropriateness and accuracy of results and conclusions ■ Choose appropriate language and forms of presentation to communicate results and solutions	- Interpret and communicate solutions to practical problems in familiar contexts and situations	- Interpret and communicate solutions to practical problems, drawing simple conclusions and giving explanations	- Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations - Draw conclusions and provide mathematical justifications	■ Draw conclusions ✓ ■ Discuss and justify their choice of method and their answer. ■ Explain their answers and conclusions to others – verbally ✓ and in writing.

Dec 2013. Kindly contributed by Keith Burnett, Birmingham Adult Education Service. Search for Keith on www.skillsworkshop.org
L1-2 Functional Maths and Adult Numeracy. For related resources and curriculum links visit the download page for this resource at skillsworkshop.
Page 6 of 6