

MASTERS FOR PHOTOCOPYING

Masters for Photocopying

Except where indicated, these Masters are designed to produce single-sided, resuable worksheets. Masters for consumable sheets are labelled (c). Masters for double-sided sheets are labelled *.

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Part 1: People making choices

Interview 1: Jenny

Sue:	Hello, I'd like to ask you a few questions about what you have just bought. Would you mind telling me what it is?
Jenny:	Well actually last week I bought a suit. I've just been to see if I could find a different one because the top and the skirt didn't actually match each other.
Sue:	Why didn't you notice that when you bought it?
Jenny:	Well, the changing rooms didn't have natural light, so I couldn't tell the difference.
Sue:	What did the shop do about it?
Jenny:	Well, I looked at the other suits and in fact I think they must have made the jackets all out of one roll of material and the skirts all out of another roll of material and they were actually two different coloured rolls. So I didn't get a different suit but I did manage to get some money back from the manageress for the inconvenience.
Sue:	So how did you go about choosing a suit in the first place what factors were important to you?
Jenny:	Well, I was looking for a suit particularly for a friend's wedding, and as it's the summer I obviously wanted it to be in a lightweight material. I quite wanted a cream-coloured one.
Sue:	So you had the season and a colour in mind. What other things were important to you?
Jenny:	Well, whether it would wash or whether it had to be dry cleaned – fortunately I can wash it. The length and style, because I'm quite style conscious that sort of thing.
Sue:	And what about the price?
Jenny:	Well, it should have been important but I had a credit card so I ignored the fact that it was quite expensive.
Sue:	So how did you actually go about making your final choice?
Jenny:	Before I went shopping I already had a good idea of what I wanted because I had spent some time browsing through my sister's mail order catalogues. I never actually buy anything from catalogues because you can't try things on – and they cost more.
Sue:	Did you try on very many before you bought this one?
Jenny:	No, it was the first shop I went into. I intended to spend the whole day looking but then I bought this one in the first shop. I did try a couple of other colours in the same style but I decided that I wanted the lighter-coloured one.
Sue:	So if you were going to buy another suit, would you come back to the same shop?
Jenny:	Not necessarily for a suit, but, yes, I would come back to this shop. I do like the clothes they have in here.

Part 1: People making choices

Interview 2: Mrs Jones

Sue:	Hello, would you mind telling me what you have just bought from Woolworths?
Mrs Jones:	Oh, it's only a notebook.
Sue:	What sort of notebook were you looking for?
Mrs Jones:	Well, I was just looking for a cheap notebook with ordinary lined paper – one that was small enough to fit in my handbag.
Sue:	So how did you go about choosing it?
Mrs Jones:	Well, I just popped into Woolworths they usually have a range of notebooks and I think they're cheaper than in other shops. I found this one which I thought was alright – it's got a really nice picture on the cover so I bought it.
Sue:	Why not go somewhere else first to see if there was anything better?
Mrs Jones:	Oh, there's no point for something like this I would if there was more money
	involved, but for this I'd only save a few pence – if anything – and it would take me more time than it's worth.
	involved, but for this I'd only save a few pence – if anything – and it would take me more time than it's worth.
	involved, but for this I'd only save a few pence – if anything – and it would take me more time than it's worth.
	involved, but for this I'd only save a few pence – if anything – and it would take me more time than it's worth.
	involved, but for this I'd only save a few pence – if anything – and it would take me more time than it's worth.
	involved, but for this I'd only save a few pence – if anything – and it would take me more time than it's worth.

Part 1: People making choices

Interview 3: Kay

You look as though you are trying to buy something. Would you mind telling me what?
I'm trying to buy a washing machine.
You're <i>trying</i> – how are you getting on?
It's a bit difficult. There are so many to choose from and they all have different features.
And which features are most important to you?
Well the price is the most important. They're all so expensive. I don't want to spend more than \pounds 350. And we want one that gets most of the water out of the clothes, so we need one with a spin-speed of about 1000 revs per minute.
What else is important?
Reliability. The one we had before was very reliable. We had it for seven years and we're only getting rid of it now because of the rust. I read somewhere that two-thirds of washing machines need repairing during the first four years, so we've been really lucky.
So why don't you buy another one the same as that?
They don't make that type any more.
So you've got to make a change. How have you been going about making your choice?
Well, we saw one we really liked the other day in a sale, but we decided that we wouldn't rush out and buy it without looking at a few others first. So I've been into the library and looked through some old 'Which?' reports to see which are the most reliable and the best value for money. Then I've been into seven shops to compare prices. And I've asked some friends. But whatever you buy you've still got to get rid of the old one, and it seems a pity if you can't get anything for it. Then yesterday, quite by chance, I noticed an advert in the paper saying that you can get a £40 reduction on the price of a new machine if you trade in your old one at the Co-op. That seems quite a good offer. I'm going back there if I can't see a better deal today.

Part 1: People making choices

Intonious A. And

Interview 4	: Andy
Sue:	Hello, what have you just bought in that record shop?
Andy:	A record of course.
Sue:	How long did it take you to make up your mind?
Andy:	No time at all. I came to buy this particular record.
Sue:	Why did you want that one especially?
Andy:	Well they're my favourite group and this is their new record. It's in the charts at the moment.
Sue:	So you didn't really need to make a choice then?
Andy:	No, not really.
Sue:	How do you usually choose records? Do you always buy the ones that are in the charts or do you sometimes buy others?
Andy:	Sometimes I <i>do</i> go in for a browse and maybe pick out two or three that I'd like but don't know too well. And yeah, sometimes it's hard to make a choice.
Sue:	Do you listen to them in the shop?
Andy:	Not often because it takes so long.
Sue:	Do you ever buy L.P.s or do you always buy singles?
Andy:	I quite often buy L.P.s. Usually I get one or two record tokens for my birthday so I tend to buy L.P.s with those. I prefer L.P.s – you get more music for your money.
Sue:	Why do you buy singles at all, then?
Andy:	Because you can get a song you like quicker. You don't have to save up – and often it takes a few months for a single to come out on an L.P.
Sue:	How do you choose an L.P? Do you feel you have to hear it all before you buy it?
Andy:	It is harder because there's more money involved. I usually have to know I'm going to like at least two or three tracks before I'll buy it. But if I like a group enough, I might buy the record without knowing any tracks at all.

Part 1: People making choices

Interview 5: Judith

Sue:	Hello, you've got a big bag of shopping there. Can you tell me why you chose that particular brand of orange?
Judith:	Because it's cheaper than the others.
Sue:	What other factors did you take into account?
Judith:	It doesn't have any additives.
Sue:	So you're concerned about price and additives. Is there anything else?
Judith:	Taste, I suppose. But I'm not the one who drinks it. I give it to my little boy.
Sue:	You've bought a big bottle 3 litres isn't it? Why do you buy so much at a time?
Judith:	Well, I don't have to come to the shop so often and it's more economical buying in bulk.
Sue:	How do you know that?
Judith:	I believe that at some stage I actually worked it out on my calculator!
Sue:	Which particular brands do you prefer?
Judith:	I usually buy Asda's or Sainsbury's own brand. Otherwise I buy something like Kia Ora or Robinsons or Quosh.
Sue:	Why do you prefer to buy the supermarkets' own brands?
Judith:	Because they're cheaper and there isn't that much difference in taste.
Sue:	Supermarkets stock several different types – orange squash, orange drinks, low calorie, orangeade. Which sort do you prefer?
Judith:	I usually don't like the low sugar ones because they taste quite unpleasant, or at least they used to. I think they're getting better now. And the orange squashes are much more expensive than the orange drinks.
Sue:	Does colour play any part?
Judith:	Not any more. I used to like a nice orangey coloured one, but the ones that say 'no tartrazine or other additives' are a less vivid orange colour, and, as I've said, that's important to me.

Part 2: Choosing a pair of trainers

Interview 1: Jane

Sue:	Hello, Jane.
Jane:	Hi!
Sue:	Your trainers look really well used. How long have you had them?
Jane:	Well only about 6 months, I suppose.
Sue:	How much did you pay for them? Were they expensive?
Jane:	No – not really! They were about £12.95.
Sue:	And what make are they?
Jane:	I'm not sure The label's come off - in fact the shoes are nearly worn out.
Sue:	So they haven't lasted very well?
Jane:	No, not really
Sue:	When you chose them, what was important to you?
Jane:	Well the most important thing was fit. My feet are a funny shape, you see, and it's not always easy to get shoes that are comfortable.
Sue:	And what else was important?
Jane:	Well price I suppose. I didn't want to spend too much on them. I would have spent more if I couldn't get a comfortable pair at that price though.
Sue:	What style did you want, or was how they look not important?
Jane:	No, not really the only thing is I don't want them to be too light-coloured. They show the dirt too easily. They have to be quite tough, 'cos I do a lot of walking about in them.
Sue:	So is that what you use them for, mainly?
Jane:	I suppose so I use them sometimes for sport too. And I usually wear them on Saturdays, and after school to go about in. They go well with my jeans, you see.
Sue:	How did you actually choose them, then?
Jane:	Well I thought I'd go round the shops till I found a pair that fitted well and were comfortable.
Sue:	So I suppose you tried on lots.
Jane:	Well no! Actually in the end, I didn't. I can tell a lot by looking – whether they'd fit me or not. Mostly they're too wide. I didn't look at any that were more than £20 either, or ones that were white or pink.
Sue:	So how many shops did you go into?
Jane:	Just the one, actually. I tried on about five pairs, and these seemed comfortable and the price was reasonable. So I bought them. There didn't seem much point in going further. I can't stand shopping, you see.
Sue:	So are you pleased with them?
Jane:	I suppose so they're alright.
Sue:	Well thanks Jane.
Jane:	Thank you.

Part 2: Choosing a pair of trainers

Interview 2: Mark

Sue:	Hello, Mark.
Mark:	Hello!
Sue:	Those look really smart trainers!
Mark:	Yeah, they're good quality, aren't they!
Sue:	How much did you pay for them?
Mark:	They cost me £19.99.
Sue:	Why did you choose that particular pair?
Mark:	Well - they're just really smart and all my friends have them.
Sue:	And do all your friends say they're good?
Mark:	Of course they're good.
Sue:	What do you use them for, then?
Mark:	Oh, everything really. I wear them all the time.
Sue:	How well are they lasting?
Mark:	They're fine – well except they're beginning to fall apart a bit here. Mind you, I've had them for 2 months.
Sue:	How well did the one's your friends had last? Have they fallen apart too?
Mark:	Yes – I think so.
Sue:	Why didn't that stop you buying them, then?
Mark:	Well, they're really smart trainers.
Sue:	Can you get them in different colours?
Mark:	Yes, but these are the best.
Sue:	White usually shows the dirt a lot. How do you keep them looking good?
Mark:	Oh – I clean them everyday.
Sue:	So you knew exactly what you wanted. Where did you get them from?
Mark:	Well, I just went into a shop and bought them. Actually I was a bit annoyed because one of my friends bought the same type in another shop – for £2 less. That really aggravated me!
Sue:	What do you look for in trainers apart from just style and colour?
Mark:	Nothing really. They've just got to look good.
Sue:	Thanks very much Mark.
Mark:	That's O.K.

Part 2: Choosing a pair of trainers

Interview 3: Eric

- Sue: Welcome Eric.
- Eric: (Panting) Sorry I'm a bit late, I've just been for a run.
- Sue: Your trainers look really good were they expensive?
- Eric: Yes they were.
- Sue: How much did they cost?
- Eric: Just under £40.
- Sue: You must be a keen runner?
- Eric: Oh yeah I'm a member of the running club but I'm not very good yet.
- Sue: How did you choose your trainers?
- Eric: Well when I decided to take up running, I bought a magazine to find out all about different types of shoes. Here it is.
- Sue: Thanks ... oh yes, it has some tables which look a bit complicated. How did it help you?
- Eric: Well they've listed the important features across the top and worked out a code for each – so I had to decide what's really important to me. First I thought about how much I wanted to pay. I decided I wanted a good pair – say more than £25 – but I didn't want to pay more than £40 – so I crossed out all the shoes more than £40 and less than £25.
- Sue: So the price was important. What else?
- Eric: Then the next thing I looked at was weight. I'm a bit heavy you see I weigh about 14 stone so I picked out all the shoes designed for my weight . . . that's this column here.
- Sue: And what did you look at next?
- Eric: I wanted shoes that were O.K. for road and cross-country running 'cos I live near some fields you see and that narrowed it down a bit more. And then there's the mileage, you see . . . I don't want to run more than 25 miles a week.
- Sue: The table mentions stability. What does that mean?
- Eric: I don't really know but I decided to go for shoes which were suitable for any kind of stability. That avoided the problem!
- Sue: How many different types were left after all that?
- Eric: Only four.
- Sue: That narrowed it down quite well . . . so what did you do next?
- Eric: Well I went round all the shops in town, and these were the only ones out of the four that anyone had in my size so I bought them!
- Sue: Well that part sounds easy! Are you pleased with them?
- Eric: Oh yeah they're really good but ...
- Sue: What's the problem?
- Eric: I've got a few blisters on my heels. They're a little bit tight round the back.
- Sue: But they don't look very worn! How much have you used them?
- Eric: I'm still breaking them in. I've had them about 6 months now but I don't wear them very much! It's these blisters you see. I normally go round in an old pair I've had for years. They're more comfortable.
- Sue: Oh ... how many others did you try on in the shop?
- Eric: Oh none 'cos if I'd crossed them out in the magazine they wouldn't have been any good, would they?
- Sue: So you think they were a good choice, then?
- Eric: Oh yes ... I suppose so.
- Sue: Well thank you very much Eric.

Part 3: Looking at a consumer report

The shopping survey

- Sue: Hello, I want to ask you about your research, but first, could you explain what all these technical terms mean?
- Barbara: We found out what the terms meant while we were looking at a 'Which?' report in the library. We decided that it would be best to start our research by seeing whether anyone had done one on orange before. Luckily, there was one report, and it gave us some ideas on what to look for. Anyway, 'orange juice' is 100% pure orange, orange 'squash' must contain at least 25% pure orange, and orange 'drink' must contain at least 10% whole orange, but that can mean pith, peel and everything! We have put that in our report.

Sue: Good. Now will you tell me how you went about producing this fascinating report?

Barbara: Well, the report's in three sections. One is based on a shopping survey which we did in town. The second is the results of a questionnaire that we gave to our class to fill in, and the third part is about a taste experiment we carried out.

Sue: That sounds very organised. Tell me more about the shopping survey you did.

- Natalie: I did that bit with Colin. It's the first thing we put in the report. We wanted to find out what you can buy in shops, so we popped into a supermarket on the way home from school, to have a look before planning how to collect the information. We were amazed by the variety available and how different they all were. We decided the most interesting things to compare were price, the quantity you get, the ingredients and the packaging. So we went back to school and drew out a rough table so that we could collect the information in an organised way.
- Sue: I noticed you've divided it up into drinks, squashes and juices what did you do next?
- Natalie: We just went back to the supermarket to fill in our table. It was a bit embarrassing actually. People kept giving us funny looks. And then in the end we walked out without buying anything! It was good fun to do, though.
- Sue: You only went into the one shop, then?
- Natalie: Yes. It would have been interesting to see how much the prices varied from shop to shop. We didn't have time to do it, though. And we had enough stuff.
- Sue: Yes. It does look like you've got plenty of information. The squashes seem to be more expensive than the drinks. Why would that be?
- Natalie: I think it's because you get more real orange in 'squashes' than in 'drinks'.
- Sue: But squashes seem to cost more than the pure orange juice too.
- Natalie: Don't forget that you have to add water to 'drinks' and 'squashes', but you normally drink juices just as they are. You can't just compare prices anyway. You have to take the size of the bottle into account....

Sue: Yes, it is complicated. Maybe we ought to look at your results in more detail.

Part 3: Looking at a consumer report

The classroom survey

Sue:	Well, we've covered a lot already, just in your first section. Let's move onto the second section your classroom survey. Tell me about that.
Barbara:	Well, we thought it would be interesting to find out more about people drinking orange. Our research questions are listed on the cover of our report.
Sue:	How difficult was it to write the questionnaire?
Barbara:	In a way it was quite easy. But some of the questions aren't very good, though we didn't know that until we got the results back.
Sue:	After you'd written the questions, what did you do next?
Barbara:	Well, we thought about going round and interviewing people with the questionnaire, but that would have taken too long. In the end, we got it photocopied, so that everyone could fill it in at the same time.
Sue:	And after they'd filled them in?
Barbara:	Then we had to sort out the results and think how to present them in an attractive way. We had to draw up tables to record the results first. Then we had to do lots of tally charts and things. We found it easier to have one person reading out the answers from the questionnaires and someone else keeping a tally. It took ages.
Sue:	Can you talk me through the results? Oh yes, here they are.
Natalie:	We tried to think of interesting ways of presenting the results. If you look at them you'll see that we used a pie chart, a bar chart, a pictogram, a sort of picture of a cup and a table of numbers. We tried to make the results attractive to draw people's attention to things we thought were important.
Sue:	Yes, I could see straight away from the pie chart that most people like fizzy drinks, and from the bar chart that most people like orange flavour. I found the pictogram was misleading though. I liked the idea of drawing a glass to show how much orange people drink, but I'm not sure that I fully understood the diagram.
Natalie:	Well, from the survey we found out, for example, that two people didn't drink any orange, one person drank three glasses a week, and so on. One even drank one-hundred glasses a week! There were lots of other results like that as well. Then we had the problem of how to show all this clearly. In the end, we grouped the information. So we said twelve people altogether drank 0–10 glasses a week, and so on, with the one person who drank over 50. So we drew a big glass and the height of the liquid in it shows the size of each group.
Sue:	Yes I see. But what about the table at the bottom what does that show?
Natalie:	Oh, that table is quite easy to understand. We thought the results to this question were very interesting. We discovered that ten people think that ingredients are the most important factor when buying orange juice – much more important than price, brand, colour or flavour. It also shows that people aren't worried about colour.
Sue:	Well that's different, we usually find that price is the most important factor. What else did you do?
Natalie:	Well we looked at whether people really know what's in the orange they buy. For example, do they know which contain the most real orange juice or the most sugar? People seem to know more about the sugar content than the orange juice content. Finally, we asked 'What would you like us to find out about orange?' I was surprised that most people wanted to know about the ingredients. The labels on the bottles only tell you names, like tartrazine. I don't understand what they mean.
Sue:	How could you have found out what they mean?
Natalie:	Well I suppose we could have telephoned a manufacturer or gone to the library, but we didn't.
Sue:	What conclusions did you come to?
Natalie:	Well we haven't finished looking at all the data yet. The more closely you look the more you seem to find out.

Part 3: Looking at a consumer report

The classroom experiment

- Sue: Well, we've now heard about your shopping survey and your classroom survey. Now tell me something about your classroom experiments.
- Natalie: Well we did two experiments on tasting orange. The first experiment was to find out if people can tell how much sugar there is in a glass of orange just by tasting it.
- Sue: How did you do that?
- Natalie: We bought three different kinds of orange, 'squash', 'drink' and 'sugar free drink'. Then we blindfolded twenty-two people and asked them to taste the drinks and tell us which they thought contained the most sugar, which had the least sugar and which was in between. We put the results in the report.
- Sue: Why did you blindfold people?
- Natalie: The orange drink is a much darker colour than the other two. We were afraid that if people saw the colour it would affect how they thought it tasted.
- Sue: Now tell me about your second experiment.
- Natalie: Well we already knew from our research that orange squash contains a lot more real orange than orange drink. We decided to find out if this means that orange squash tastes more like real oranges or if people really can't tell the difference. We blindfolded twenty-two people again and asked them to taste five different drinks two orange drinks, and two orange squashes, and we put in a lemon drink as well.
- Sue: What was the lemon drink for?
- Natalie: Oh, the lemon drink was to see if people really can tell lemon flavour from orange flavour.
- Sue: Isn't that obvious?
- Natalie: It is not as easy as you think when you're blindfolded. As people tasted each drink, we asked them to rate the drink according to how orangey it tasted on a scale from 0 to 4. So 0 meant there was no orange flavour and 4 meant that the taste was very orangey. Then we did the whole thing again without blindfolds to see how much people are affected by the colour.
- Sue: Well, thank you Natalie and Barbara. It's been interesting talking to you but that's all we have time for this week.

Part 1: People making choices

Name: _____

ltem	Important factors and specifications	How the choice was made	How <i>you</i> would choose a similar item
Suit			
Notebook			
Washing machine			
Record			
Orange squash			

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ۍ	Classroom experiment	tell how ar there is , by taste? inks taste real
		lo people r <u>eal</u> ly bout orange? do people want v about orange?
		lo people decide arange to buy ?
		much orange do le drink ?
4	Classroom survey	nat types of fruit ink do people like?
5	Shopping survey	hat can you buy in 1e shops ?
Result on page	Our research methods	ur research aims
atalie	Barbara, Colin and N)rinking consumer report b

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						-							
		Top 3 ingredients	Orange juice (50%) Sugar Water	Orange juice(40%) Sugar Water	Orange juice (25%) Water Sugar		Oranae	juice					
		Packaging and colour	Glass bottle Orange is pale colour	Plastic bottle Orange is pale colour	Plastic bottle Orange is pale colour		Tin		s small 200ml cartons each with straw.	6 small 200ml cartons each with		Large carton	Very large carton
		Cost	69p	£1-12	£1-42		458	-	65p	£1.19		65p	E1-04
		Volume	730ml	1-25 litres	l · 5 litres		540ml		600ml	l·2 litres		l litre	2 litres
		Orange " <u>squashes</u> "	Sainsbury's "High Juice "Orange squash	St.Clement Orange squash	Robinsons "High Juice"Orange squash	Orange ''j <u>uices'</u> '	Sainsburu's	pure Jaffa	Orange Juice				
						T	·····		•••••			r	r
	rt trip to ito 3 sections:		ole orange to be diluted.	6 d to be diluted.	fore drinking.	ort).	Top 3 ingredients	Water	Sugar Oranges	Water Sugar Oranges	Water Elucose syrup Oranges	Water Glucose syrup oranges	Water Oranges(16%) Malic acid
rvey	ve found out on a sho The table is divided ir		contain at ieast 10 % wh clude the peel!). nks" in our survey need 1	t contain at least 25% ce uashes" in our survey nee	100% pure orange. 10t normally diluted be	July 1987 "Which?" rep	Packaging and colour	Plastic bottle Orange is medium colour	Large polythene containers	Plastic bottle Orange is deep colour	Plastic bottle Orange is deep colour	Plastic bottle Orange is deep colour	Plastic bottle Orange is pale colour
ns	/hat v 1988 .		n must can in ne "dri	h mus ge jui he "sa	h are i e are i	in the	Gest	54p	£1-04 £1-49	67p	d69	67p	49p
bud	ry of u th May		- which (this All #	"- which oran All t	- which These	intages	Volume	1 litre	2 litre 3 litre	l litre	l litre	l litre	l litre
I. The study	Below is a summa Sainsbury's on 26		orange aring	• Orange ⁴ squashes	• Orange "juices"	(We found these perci	Orange " <u>drinks</u> "	Sainsbury's	Whole Orange Drink	Quosh Whole Orange Drink	Robinsons Whole Orange Drink	Kia Ora Whole Orange Drink	Sainsbury's Sugar- free Orange Drink

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STAGE 1

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 I he classroom survey 	ORANGE SURVEY (CONTINUED)
Here is the guestionnaire we used :	6. When you buy orange, which factors are most important
ORANGE SURVEY	to you? Put a 1 by the most important, a 2 by the next,
1. Do you prefer 'still' or 'fizzy' drinks ? still/fizzy/don't mind (Ring your answer)	and so on up to a 5 for the least important. Price Incredients (sumar colouring water etc.)
2. Draw a mouth on each face to show how much you like the flavours. Use these mouths:	Brand name (Quosh, Robinsons etc) Colour
Love it! Nice O.K. Nofnice Horrible!	Flavour What other factors are important to you ?
Lemon Orange Blackwrrant Lime Apple	7. Which of the following contains most real orange juice ?
3. What type of orange do you like best? Tick the box.	Orange'squash' Orange'drink' Both the same Don't know
Pure orange juice	Which of the following contains most sugar?
Orange 'drink' (or 'whole orange') to be diluted Orange barley water	Orange'squash' Orange'drink' Both the same Don't know
Fizzy orange	8. What would you like us to find out about orange?
4. On average, about how many glasses of orange do you drink in a week?	
5. What brand of orange do you buy? For example : Quosh, Robinsons.	Thank you for filling in our questionnaire .

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STAGE 1

Question 7. Which contains most	real orange juice?	Can people tel	l how much s	ugar there	is in ore	inge , jus	t by tas
Number of people who think	Most people are wrong because 'Squash' must contain at least 25% real orange and 'Drinks'	we blindfolde	d 22 people and ree' orange dri vranae' drink (asked them nk (no suga some sugar	to taste (r)		
this 6	must contain at least	ıl ngiH' ◆	ice orange squ	ash (lot of	sugar)		
4		Then they h sugar; which	ad to tell us wi contains the l	hich they H east sugar	nink cont and whicl	ains the r h is in-be	nost tween .
0 Drink Squash Don't know		Here are the	results :	Wha	t they th	ought	
Nhich contains most sugar ?				least sugar	in-between	most sugar	
[4]	Most people are right this	Wha	Sugar-free	6	14	2	
Number ¹¹ of people 10	time. "On average , squashes	the	Whole orange	او	6	0	
who think this 8-	give you 2° teaspoonfuls of sugar in a diluted	1951	High juice	0	2	20	
- + ⁻	glassful, about 50 calories. Whole orange drinks give you about 30 calories." (WLick?"	So, 2 people the most su	thought that gar!	'sugar-free	e' orange	containe	7
Drink Squash Same	ont litrom which is report	Which drinks	taste most li	ike real or	anges ?		
Nhat else do people want to kn	ow about orange?	We blindfold	ed 22 people ar	nd asked th	em to tas	ste 5 diff	erent
Question 8. What would you like	us to find out about orange?	drinks and r	ate each one a	.ccording to	"orangir	1ess."	
5 people wanted to know about	ingredients . For example,		-	2			4
How much artificial colouring	' 'How much sugar ?'	No oran	je flavour Just a bit	Some oran	ge Quite	a lot Ver	haburano f
2 people wanted to know if oran 2 people wondered how the fiz 2 people wanted to know wher 3 people wanted to know wher	ge juice makes you fat . z was made . e orange is made . uice koons vou awake at night .	We then repe much people The results a	ated the experi are affected b re on the next	ment witho by the colou page	ut blindfe r.	olds to see	how a

	 4 50041 4 50041 4 100016 4 4 100016 4 4 100016 9 4 100016 	3 1 2 3 3 3 3 3 3 4 4 1 0 0 0 1 2 0 Sainsbury's Whole Orange	+ - - - - - - - - - - - - -	+ 500 → 5000 → 500	ainsbury's E.Sainsbury's h Juice Whole Lemon	2.91 1.5
	w w Gebbie w w Gita w w Glette * f Rhiannon w w	3 3 2 4 3 1 4 4 4 4 0 4 1 4 2 Vhole Orange B	+ 500000000 + 5000000000 + 5000000000		were : C. Robinson's D.S High Juice Hig	2.45
or each perso	2 w Joanne - 12 Sanjoy 14 w Greg 14 w Greg	3 2 3 4 4 3 2 4 4 2 0 0 2 0 0 A. Quosh V	 ©°	00-	r each drink B. Sainsburys Whole Orange	1.82 2.05
the results f	10 + 16tt 10 m Kella - m 20101 0 m 70nize	0 2 2 1 4 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	phs show people gave to each no blindfolds on		ge ratings fo A. Quosh Whole Orange	2.72 3.18
Here are -	- t Mark - t Mark - t Mark	Type of on Type of a t t	These grat how many 0,1,2,3,4 1 drink with O= perso		The avera	Blindfolded Not Blindfolded
	juice juice	بر 9 مرد ۲۵	t m t m t 1901	Drange 30	t temon	
at least 10% whole orange	at least 35% orange at least 50% orange 0% orange juice! 14eA 7	type of drink, ngey flavour) t t t r t t t t t t	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	ange B. Sainstury's Whate C 200000 2000000	1 Mice E. Sainsbury's Whole	م میں میں میں میں میں میں میں میں میں می
rink] at least 10% ude Drink] whole orange	Drange Squash at least 35% orange Orange Squash at least 50% orange ion Drink 0% orange juice!	r person rated each type of drink, r) to 4 (very orangey flavour) e o e e e e e e e e e e e e e e e e e e	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	A. Quosh Whole Orange B. Sainsburys Whole Crange 0 000000000000000000000000000000000000	D. Sainsbury's High Juice E. Sainsbury's Whole	۲ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵ ۵

'Drinking orange!' – Discussion questions

1. The shopping survey

 ing Orange 'squashes' Which is the most economical way of buying orange 'squash'? Rank the different ways in order, from most economical to least economical. Give reasons why you think people buy 'squash' in each of these different ways. 	 ing Making comparisons Why do you think that, in general, orange 'squashes' cost more than orange 'drinks'? Why should someone buy a litre of orange 'squash' when he or she could buy a litre of orange 'juice' for less money? It's always more economical to buy large quantities'. How true is this statement, from the tables? Think of situations when it would be better to buy smaller quantities.
 Orange 'drinks' Which is the most economical way of bu orange 'drink'? Rank the different ways in order, from meconomical to least economical. Give reasons why you think people buy 'c in each of the different ways. 	 Orange 'juices' Which is the most economical way of bu orange 'juice'? Rank the different ways in order, from m economical to least economical. Give reasons why you think people buy 'j in each of the different ways.

'Drinking orange!' – Discussion questions

2. The classroom survey

, The (questionnaire	How much orange do people drink? How do people decide which orange to buy?
• •	y you think that this is a good questionnaire?	 Look at the results to questions 4, 5 and 6. What conclusions can you draw?
€ Ø	hich questions are good and which are not so od? Why?	 What is good or bad about the way these results are presented?
• Fook	at the results of the survey w many people filled in the questionnaire?	 Could the results to question 5 have been biased by the way the question was asked? How?
) all the graphs and tables show this humber people? they do not, what do you think happened?	 What matters most to people when they buy orange? Price? Ingredients? Brand name? Colour? Flavour?
		Put these factors in order of importance. Explain your method.
What	t types of fruit drink do people like?	What do people really know about what is in orange?
• •	ok at the results to questions 1, 2 and 3. hat conclusions can you draw?	 Look at the results to question 7. What conclusions can you draw?
• Wi res	hat is good or bad about the way these sults are presented?	What else do people want to know about
• Lo Set	oking at the results to question 2, 'orange' ems to be the most popular flavour. Try to	 Compare the results to question 8 with the
EX		results to questions 6 and 7. What conclusions can you draw?

'Drinking orange!' – Discussion questions

3. The classroom experiments

Can people tell how much sugar there is in orange, just by taste?

Read carefully through the results of this experiment.

- Which type of orange did most people think contained the least sugar? . . . the most sugar?
- Were they right? How can you tell?
- Were they just guessing? How can you tell?
- What conclusions can you draw?

Which drinks taste most like real orange?

Look through the results of the *blindfold* tests.

- From the graphs, which type of orange tastes most like *real* oranges? Try to rank them in order of 'oranginess'. (The average ratings may help.)
- How true is it that 'Drinks which contain more real orange juice taste more like real oranges?' (Refer to the table at the top of page 10).

Look through the results of the tests with no blindfolds.

• What effect does colour have? (Refer back to the tables on pages 2, 3 for the colours of the different types.)

Drinking orange!' – Some	conclusions
Part 1: The Shopping survey Write down one conclusion under each heading: Orange 'drinks'	
Orange 'squashes'	
Orange 'juices'	
Making comparisons	
Part 2: The Classroom survey	
The questionnaire What is good or bad about the questionnaire? Ma	ke a list under each heading.
Good points	Bad points

Part 2: The Cla	ssroom survey (continued)	
Jsing the results	s, write a short answer to each research question.	
What types of fro	uit drink do people like?	
How much orang	e do people drink?	
low do people c	lecide which orange to buy?	
What do people	really know about what is in orange?	
Nhat else do peo	ople want to know about orange?	
Part 3: The Cla	ssroom experiment	
Jsing the results	s, write a short answer to each research question.	
	ow much sugar there is in orange, just by taste.	
Which drinks tast	e most like real oranges?	

What did yo	ı choose?	
What went v (Did you forget Did you find ou	vrong? some factors? Did you have a poor method of choosing? It enough information?)	
How would y	you go about choosing this item next time?	

Possible aims of research

Name	Item for research				
Kind of person who may be interested in your report	Factors that the person is interested in				

Research aims	Suitable research methods

.

Final plan Filled in by Subject for our consumer report
 Research aim(s)
Research method(s) Describe in <i>detail</i> how you will achieve your aim(s)
How will you collect and organise your data? Attach to this sheet.
 any questionnaires, lists showing <i>all</i> the equipment you need for your experiments and the names of those responsible for bringing it, any tables or charts you will use to help you record information.

Researc	Research methods									
Some students aims are listed help them to ac	Some students are planning to do some consumer research into fizzy soft drinks. Their research aims are listed below. Underneath each aim, write a few lines describing <i>a method</i> which will help them to achieve this aim.									
(a) Aim: Method:	To make a complete list of all the fizzy drinks you can buy.									
(b) Aim: Method:	To find out how fizzy drinks are made.									
(c) Aim: Method:	To find out which types of fizzy drinks people say they prefer.									
(d) Aim: Method:	To find out if people can taste any difference between cheaper fizzy drinks and more expensive fizzy drinks.									
/ . 										
(e) Aim: Method:	To find out which adverts for fizzy drinks are most memorable.									

Tea bags

Two students have done a small shopping survey to find out the different kinds of tea sold at a supermarket.

They have made notes on scraps of paper.

Boxes of 80 standard tea bags (250g) Lyons - £1.07 Tetley - £1.09 Typhoo-£1.07 Tetley tea bags 40 bags cost 55p (125 grams) 80 bags cost £1 09 (250 grams) Twinings 'Earl Grey' 160 bags cost £2.17 (500 grams) 50 bags for £1.05 (This weighs 125g) Typhoo have a brand called Brook Bond PG Tips 'one cup' which contains £ 3.12 for 240 bags £ 2.17 for 160 bags £ 1.09 for 80 bags smaller tea bags 125g box holds 60 bags 250g box holds 120 bags (80 bags weigh 250g) These cost 61p and £1.19 Sainsbury's Brown Label 80 bugs - 62p (250 grams) 80 bugs-79p (250 grams) Red Label (These figures were obtained in October 1988) Make a table showing all this information as clearly as you can. Which way of buying tea is most economical? What other factors would you take into account when buying tea?

Cheese flavoured crisps

A group of students* have done an experiment to see which of four brands of cheese flavoured crisps taste most 'cheesy'. They blindfolded 19 people and asked them to taste each kind of crisp and then rate it on a scale of 0 to 4. 0 means *no* cheese flavour and 4 means that there is a *very strong* cheese flavour.

Here are their results.

Brand	Quavore	Walkors	'Amorican	Ctiv
Dianu	(abadaa)	vvaikers		
	(cneese)	(cneese and onion)	Quarterbacks	(cneese and onion)
Name			(cheese)	
Akhmed	1	3	4	2
Arfan	2	3	1	2
Barry	2	4	1	2
Scott	1	3	2	3
Kevin	1	4	1	3
Shafique	2	3	3	0
Leighton	1	4	4	3
Rehman	3	4	1	4
Yasmin	1	3	2	4
Louise	0	0	0	0
Attia	3	4	3	2
Sarah	1	3	2	1
Rani	4	3	4	3
Anne-marie	4	4	2	3
Kirstie	0	4	4	0
Lisa	3	3	3	4
Malcolm	3	2	4	1
Eileen	2	0	3	3
Eric	1	1	2	0
		1		

*These results were taken from a survey conducted by a group of students at Sandfield School, Nottingham. The project team in no way endorses any conclusions obtained from the data.

Continued on M30



Evaluating a report
Title of report being evaluated This sheet filled in by
Presentation (Was the report clear and interesting?) Good points:
Ways of improving the presentation:
Organisation (Were the surveys and experiments well-organised?) Good points:
Ways of improving the organisation:
Communication (What did you learn from the report?)
Suggestions for further improvements



Eric has a big choice. Among other things, he could try

Acting Archery Badminton Bell ringing Bird watching Bowling Bridge Camping Canoeing Canoeing Carpentry Chess Collecting Cooking Crafts Cricket Dancing Darts Fishing Flower arranging Football Golf Hang gliding Hockey Horse riding Jogging Judo Karate Knitting Model making Music Needlework Painting Parachuting Photography Playing a musical instrument Pot holing Reading Rock climbing Rugby Sailing Sculpture Singing Skiing Snooker Squash Swimming Table Tennis Walking Watching Television Weight lifting Windsurfing Yoga

Your task is to prepare an interview which will quickly and efficiently enable you to suggest suitable hobbies to people like Eric. Your interview questions should only require answers of 'Yes' or 'No'.

For example:



When you have devised an interview, you could try putting it onto a computer, so that the computer can do the interviewing and advising.

Testing a new product

A manufacturer is testing a new deodorant. She has created two possible fragrances, A and B, and two possible names for the fragrances, 'Bouquet' and 'Hunter'. She decides to conduct an experiment to see which combination of fragrance and name people prefer.

40 people are asked to sample a small amount of the deodorants, sprayed from 4 cans. Each person takes a break for 10 minutes between smelling deodorants, so that they do not become confused.



(They are *not* told that 'Bouquet A' and 'Hunter A' both contain exactly the same fragrance, A, or that 'Bouquet B' and 'Hunter B' both contain the same fragrance, B.)

Each person is asked to fill in a sheet, ticking a box to show how he or she feels about each of the four deodorants.

SexM			
\prec			
Bouquet A	\checkmark		
Bouquet B			\checkmark
Hunter A		\checkmark	
Hunter B			

(For example, this person is male. He hates Bouquet A, thinks Bouquet B is wonderful, that Hunter A is average and Hunter B is quite nice.)

The results from the experiment will be given to you. What conclusions can you draw?















Sex Ma	le	~	 	
~		Ø		
Bouquet A	J			
Bouquet B	J			
Hunter A		ノ		
Hunter B		7		









Renting or Buying a television



You could rent this set, sir, for £17.98 per month . . .

or, you could buy it for cash, which will cost you £399.99 . . .

or you could buy the set using our excellent credit arrangement: 10% deposit then £20.80 each month for two years . . .

- Compare the different ways of paying.
- Which would you advise the customer to choose? Why?
- What other information would you need to know?

Cola tasting

Try setting up a small experiment to see if people tell any difference between Pepsi Cola and Coca Cola:

Blindfold members of your class and give each person three glasses of drink to taste; two containing Pepsi and one containing Coke.

Ask each person to identify the odd one out.

- (a) What conclusions can you draw from your results?
- (b) Suppose that, in another experiment, 12 class members tasted the drinks and no-one could tell the difference, everyone just guessed at the 'odd one out'. How many would be expected to guess correctly?
- (c) If 12 people tasted the drinks and 7 correctly identified the odd one out, what conclusion could you now draw?



Record sheet

		Stage 1			Stage 2		Stage 3			Stage 4	
Name	Criteria satisified A student has shown that he or she can:	 identify important factors and methods involved in decision-making, 	 i) obtain and interpret information from oral interviews, 	iii) obtain and interpret information from tables and graphs,	iv) identify possible research aims,	v) select appropriate research methods,	vi) devise suitable methods for the collection and organisation of data,	vii) present a summary of research data in a clear, organised way,	viii) draw sensible conclusions from a collection of research data,	ix) take an active part in compiling his or her own report,	 x) evaluate a report and suggest improvements to it.
				<u> </u>	<u> </u>		<u> </u>		<u>د</u>		
						······					
·											
		<u></u>									



Crisps for the disco (continued)

- 2. From the graph, answer the following questions.
 - a. How many people were interviewed?
 - b. How many people would not eat any crisps?
 - c. How many people would eat 4 packets of crisps?
 - d. Will 200 packets of crisps be enough for the disco? Give reasons for your answer.
 - e. How many packets would you advise the group to buy? Explain how you obtain your answer.

Here is another question from their survey.



Look at these four flavours, then give them points like this: 2 points – 'I like the flavour a lot' 1 point – 'the flavour is O.K' 0 points – 'I don't like the flavour'

Here are the results.

Contraction of the second seco									
Plain	1	Plain	1	Plain	I	Plain	I	Plain	1
Salt and Vinegar	0	Salt and Vinegar	2	Salt and Vinegar	0	Salt and Vinegar	Z	Salt and Vinegar	0
Smoky Bacon	1	Smoky Bacon		Smoky Bacon	1	Smoky Bacon	٥	Smoky Bacon	2
Cheese and Onion	2	Cheese and Onion	1	Cheese and Onion	2	Cheese and Onion	1	Cheese and Onion	I
Plain	2	Plain	1	Plain	2	Plain	1	Plain	1
Salt and Vinegar	1	Salt and Vinegar	0	Salt and Vinegar	1	Salt and Vinegar	0	Salt and Vinegar	1
Smoky Bacon	٥	Smoky Bacon	1	Smoky Bacon	0	Smoky Bacon	۱	Smoky Bacon	0
Cheese and Onion	1	Cheese and Onion	2						
Plain	1	Plain	1	Plain	1	Plain	1	Plain	1
Salt and Vinegar	0	Salt and Vinegar	0	Salt and Vinegar	0	Salt and Vinegar	0	Salt and Vinegar	2
Smoky Bacon	Ι	Smoky Bacon	0	Smoky Bacon	2	Smoky Bacon	2	Smoky Bacon	0
Cheese and Onion	2	Cheese and Onion	2	Cheese and Onion	0	Cheese and Onion	1	Cheese and Onion	1
Plain	I	Plain	1	Plain	z	Plain	1	Plain	1
Salt and Vinegar	1	Salt and Vinegar	0	Salt and Vinegar	1	Salt and Vinegar	Z	Salt and Vinegar	0
Smoky Bacon	2	Smoky Bacon	0	Smoky Bacon	0	Smoky Bacon	0	Smoky Bacon	2
Cheese and Onion	1	Cheese and Onion	2	Cheese and Onion	1	Cheese and Onion	2	Cheese and Onion	0

Crisps for the disco (continued) 3. Draw a table to show the *total* number of people giving each rating (0, 1 or 2) to each flavour. 4. Copy the table below, and use it to rank the four flavours in order of popularity. Explain your method, underneath. This is the best liked flavour ____ a. ____ b. _____ C. _____ This is the least liked flavour- d. The friends are arguing. Yes they can. It doesn't matter People won't buy which brand name the cheaper brands. you buy. People can't They don't taste tell the difference. so nice. 5. On a copy of the table below, describe in detail how you would organise an experiment to see if people can tell any difference in taste between an expensive brand of crisps and a cheaper brand. Number of people needed _____ Equipment needed What we would ask people to do How we would collect the results (Draw the table that you would use and make up some results to show how you would fill it in.)

Chocolate

A group of students has been doing a consumer survey on chocolate bars. The students began by giving a questionnaire to 30 teenagers in their school. Part of the questionnaire is shown below:



The results to question A in the survey are shown below:

Male	Female	Male	Female	Male	Male
1	4	5	1	2	25
Male	Female	Male	Male	Male	Female
13	0	2	9	6	16
Female	Male	Male	Male	Female	Male
14	10	19	11	1	0
Male	Male	Female	Male	Female	Male
1	3	10	25	16	13
Female	Male	Male	Male	Male	Female
30	8	2	0	28	0

Chocolate (continued)

- 1. Look at the results to question A.
 - (a) Draw a histogram or frequency bar chart to show the results to question A. (Begin by grouping the data into suitable class intervals.)
 - (b)



We have found that the total numbers of bars eaten by all the males is 183, and the total number eaten by all the females is 92. This means that, in general, men eat a lot more chocolate than women.

Give two reasons why this conclusion is false.

Write down *one correct* conclusion (comparing male and female consumption of chocolate) that can be supported by the data. Explain clearly how you obtain this conclusion.

2. The results to question B are shown below.

Type of chocolate	Milk	Plain	Orange Flavour	Mint Flavour	White
Number who liked this type best	20	6	1	2	1

Draw a pie chart accurately, to show this information.

3. The results to question C are shown below.

	Ranking						
	1	2	3	4	5		
Ingredients	1	5	10	3	8		
Price	5	11	6	4	2		
Flavour	20	6	1	0	0		
Brand	1	5	4	12	5		
Look of packet	0	0	6	8	13		

This table shows the numbers of people who gave each ranking to each factor. (For example, 13 people said that the 'Look of the packet' was the least important factor).

- (a) How many people answered question C? (The others left it out.)
- (b) One of the numbers in the table is wrong. Which number is it? What should this number be?

Explain how you obtained your answer.

Chocolate (continued)

3. (c) Copy the table below and, using the data, put the five factors in order of importance. Underneath your table, explain the method you used to do this.



The students decided to conduct an experiment to see if people can taste any difference between white chocolate and milk chocolate. They blindfolded 30 people and gave each person three pieces of chocolate; two were milk chocolate and the other was white chocolate. Each person had to try to identify the 'odd one out'.

4. (a) Suppose that no-one can tell the difference, and that they all guess, randomly.

How many people would you expect to guess correctly?

- (b) Suppose that 15 people *can* tell the difference, and the others guess, randomly.How many people would you *now* expect to identify the odd one out correctly?
- (c) Suppose that you want to adapt the experiment to see if people can tell the difference between milk chocolate, white chocolate and diabetic chocolate.

Describe in detail, how you would carry out the experiment.