

GCSE Science/Chemistry

Mark Scheme

GCSE Science/Chemistry
Internally Assessed Activity Unit C1a
Topic 6 - Chemistry in the home

Food Chemistry

edexcel 

1	a		ethanoic acid - vinegar; sodium chloride - table salt; Sodium hydroxide - caustic soda; [Do not allow if 2 lines reach answer]	1 1 1	
	b		Flame symbol - flammable; Skull symbol - toxic; Cross symbol - harmful; [Do not allow if 2 lines reach hazard description]	1 1 1	
					Total 6 marks

2	a		Sodium hydrogen carbonate; [Do not allow baking powder] sodium carbonate + carbon dioxide + water; [all 3 correct in any order]	2	
	b		Thermal decomposition;	1	
	c		(Bubble gas through) limewater; Limewater goes cloudy/milky/white/precipitate;	1 1	
	d		Makes cake rise;	1	
	e		New product/ chemical substance is made Or can't reverse the process/get original ingredients back;	1	
	f	i	All bars correct height and drawn; Allow one error in height for one mark	2	
		ii	Increases;	1	
					Total 10 marks

3	a		Causes cancer in rats; and may (have been thought) to have risk in humans;	1 1	
	b		Effects (now known) not to be relevant to humans; Diabetics do not have higher cancer rate; In WW2, not higher cancer rate;	1 1 1	
	c		They will be unlikely to be biased/ they will be knowledgeable about issue;	1	
	d	i	Some studies disagree (with study of 47,000 men); Unsure of dose; May need to eat other nutrients;	1 1 1	
		ii	Alan: Two from: People have been eating tomatoes for years; therefore probably harmless; will not be contaminated in factory; Philip: Two from: 'Natural' products have other (naturally occurring) chemicals in; may be contaminated by fertilisers or pesticides; tomatoes only have a small dose of lycopene;	2	
					Total 11 marks

					Overall total 27 marks
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