RECOGNISING ACHIEVEMENT

Mark Scheme 2848
January 2005

Abbreviations, annotations and conventions used in the Mark Scheme	/	= alternative and acceptable answers for the same marking point
	;	= separates marking points
	NOT	= answers which are not worthy of credit
	( )	= words which are not essential to gain credit
	____	= (underlining) key words which **must** be used to gain credit
	ecf	= error carried forward
	AW	= alternative wording
	ora	= or reverse argument

Question	Expected Answers	Marks
1 a i	Visible/ light	1
1 a ii	infrared *NOT heat*	1
1b i	they/carbon dioxide/CO_2/molecule/bonds vibrates/bends/stretches (1); more/faster (AW)(1); *second mark tied to first* gain/increase in vibrational energy scores (2) *IGNORE* references to kinetic energy and molecules heating up	2
1 b ii	*Assume advantage followed by disadvantage unless stated* Advantages: Warmed planet (1); so that life could evolve (1) *or* continues to warm planet (1) so that life can survive/ specified agricultural change (1) Disadvantages: Too much warming/global warming (1) will lead to ice caps melting/climate change/Gulf stream stopping/sea levels rising/flash floods (1) Mention of uv or ozone is a CON to *second* mark in the pair concerned. QWC Written in sentence(s); grammatical; spelling correct (allow one error in either)	4 1
1 c	CO_2/ molecules leaving and entering solution (1); at the same rate (1)*mark separately* if *refers to some process or "reaction".*	2
1 d i	The u.v. (radiation/light) (needed to give a tan) (1) cannot pass through/absorbed by glass (1) *must refer to radiation. NOT "reflected by"*	2
1 d ii	$O_3 \rightarrow O_2 + O$ (1) hv (over arrow) (1) *mark separately* *accept* O_3 + hv	2
1 e i	ClO + O_2 (1); ClO + O (1) *IGNORE dots*	2