GCE

Economics

H060/01: Microeconomics

Advanced Subsidiary GCE

Mark Scheme for June 2019

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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Annotation	Meaning
BP	Blank Page – this annotation must be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.
✓	Tick
✗	Cross
CON	Confused
BOD	Benefit of doubt
KU	AO1 – Knowledge and understanding
APP	AO2 – Apply knowledge and understanding
AN	AO3 – Analyse
EVAL	AO4 – Evaluation
^	Omission
NAQ	Not answered question
SEEN	Noted but no credit given
TV	Too vague
OFR	Own figure rule
REP	Repetition

Subject–specific Marking Instructions

INTRODUCTION

Your first task as an Examiner is to become thoroughly familiar with the material on which the examination depends. This material includes:

- the specification, especially the assessment objectives
- the question paper and its rubrics
- the mark scheme.

You should ensure that you have copies of these materials.
You should ensure also that you are familiar with the administrative procedures related to the marking process. These are set out in the OCR booklet Instructions for Examiners. If you are examining for the first time, please read carefully Appendix 5 Introduction to Script Marking: Notes for New Examiners.
Please ask for help or guidance whenever you need it. Your first point of contact is your Team Leader.

Rubric Infringement

Candidates may infringe the rubric in the following way:

- answering two questions from Section C.

If a candidate has written two answers for Section C, mark both answers and award the highest mark achieved.

USING THE MARK SCHEME

Please study this Mark Scheme carefully. The Mark Scheme is an integral part of the process that begins with the setting of the question paper and ends with the awarding of grades. Question papers and Mark Schemes are developed in association with each other so that issues of differentiation and positive achievement can be addressed from the very start.

This Mark Scheme is a working document; it is not exhaustive; it does not provide ‘correct’ answers. The Mark Scheme can only provide ‘best guesses’ about how the question will work out, and it is subject to revision after we have looked at a wide range of scripts.

Please read carefully all the scripts in your allocation and make every effort to look positively for achievement throughout the ability range. Always be prepared to use the full range of marks.

Levels of response / Level descriptors	Knowledge and understanding/ Application	Analysis	Evaluation
Strong	Precision in the use of the terms in the question and applied in a focused way to the context of the question.	An explanation of causes and consequences, fully developing the links in the chain of argument.	A conclusion is drawn weighing up both sides, and reaches a supported judgement.
Good		An explanation of causes and consequences, developing most of the links in the chain of argument.	A conclusion is drawn weighing up both sides, but without reaching a supported judgement.
Reasonable	Awareness of the meaning of the terms in the question and applied to the context of the question.	An explanation of causes and consequences, which omit some key links in the chain of argument.	Some attempt to come to a conclusion, which shows some recognition of the influencing factors.
Limited	Awareness of the meaning of the terms in the question.	Simple statement(s) of cause and consequence.	An unsupported assertion.

Multiple Choice Questions	Answer
1	A
2	B
3	A
4	C
5	B
6	B
7	D
8	B
9	C
10	A
11	D
12	D
13	B
14	D
15	D

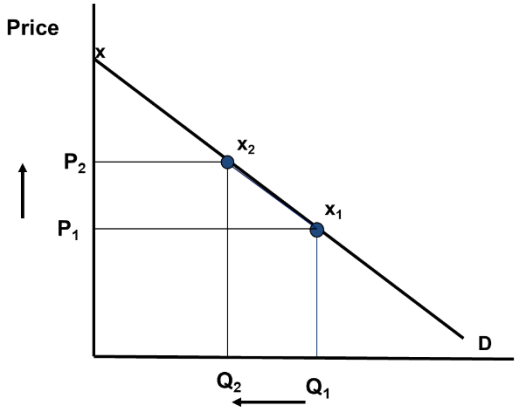
Q	Key	Rationale	AO	Quantitative Skills
1	A	**Rationale** **A.** ***Correct: This is a likely to be found in a planned economy*** **B.** There are likely to be high tax rates on any profits companies earn **C.** The state will provide all essential services like education **D.** Workers may be paid differently (though inequality may be less)	1	
2	B	**Rationale** **A.** It may be easier to replace labour with machines (capital) as tasks are subdivided **B.** ***Correct: as workers become more skilled output per worker will increase*** **C.** Workers need fewer skills as tasks are subdivided; training costs will fall **D.** Workers are likely to be highly specialised, so it will be more difficult to change jobs	1	
3	A	**Rationale** ***A. Correct: Supply will increase (as costs of production fall) and demand will fall (as global demand for steel falls)*** **B.** Supply and demand will rise **C.** Supply will fall and demand will rise **D.** Supply and demand will fall	2	
4	C	**Rationale** **A.** A fall in income will lead to a fall in the demand for X **B.** A fall in income will lead to a fall in demand for X ***C. Correct: As X is normal and X and Y are complements then the demand for X will increase*** **D.** As X and Y are complements a rise in the price of Y will lead to a fall in demand for X	3	x
5	B	**Rationale** ***A.*** This will mean PED is inelastic ***B. Correct: This will mean PED is elastic*** **C.** This will mean PED is inelastic **D.** This will mean PED is inelastic	1	

6	**B**	**Rationale** **A.** At price £54, quantity per day (Q) is 600 and total cost (TC) is £1800; average cost = TC/Q = £3. **B.** ***Correct: At price £54, quantity per day (Q) is 600 and total cost (TC) is £1800; average cost = TC/Q = £3*** **C.** At price £54, quantity per day (Q) is 600 and total cost (TC) is £1800; average cost = TC/Q = £3 **D.** At price £54, quantity per day (Q) is 600 and total cost (TC) is £1800; average cost = TC/Q = £3	2	x
7	**D**	**Rationale** **A.** Marginal cost is the addition to total cost of one more unit which is £(632 – 600) = £32. **B.** Marginal cost is the addition to total cost of one more unit which is £(632 – 600) = £32. **C.** Marginal cost is the addition to total cost of one more unit which is £(632 – 600) = £32. **D. Correct: Marginal cost is the addition to total cost of one more unit which is £(672 – 600) = £72.**	2	x
8	**B**	**Rationale** **A.** Maximum profit occurs at the output where total revenue (PxQ) minus total cost is at a maximum or where marginal revenue equals marginal cost*. Here it is* £2 (9.5 x 2 - 17). **B.** ***Correct: Maximum profit occurs at the output where total revenue (PxQ) minus total cost is at a maximum or where marginal revenue equals marginal cost; in this case*** £4 (9 x 3 – 23) at output 3. **C.** Maximum profit is starting to decline. It is £3.4 (8.8 x 4 – 31.8) **D.** Maximum profit is starting to decline. It is £2 (8.5 x 5 – 40.5)	3	x
9	**C**	**Rationale** **A.** The change in quantity demanded is 10% as it is the change (20) divided by the original quantity (200) and change in price is 20% as it is the change in price (£8) over the original price (£40) **B.** This has the formula the wrong way round **C. Correct: The change in quantity demanded is 10% as it is the change (20) divided by the original quantity (200) and change in price is 20% as it is the change in price (£8) over the original price (£40**) **D.** The change in quantity demanded is 10% as it is the change (20) divided by the original quantity (200) and change in price is 20% as it is the change in price (£8) over the original price (£40)	2	x

10	**A**	**Rationale** **A.** ***Correct: diseconomies of scale can occur in the long run when the scale of production is changed and all factors of production are variable*** **B.** there are no fixed factors of production in the long run **C.** there are no fixed factors of production in the long run **D.** there are no fixed factors of production in the long run	1	
11	**D**	**Rationale** **A.** Combination B is outside the PPC (i.e. not attainable, given current resources) **B.** Combination C represents less capital goods than A and D, and an inefficient allocation of resources **C.** Combination D represents more consumer goods and less capital goods than A ***D. Correct: Combination A represents more capital goods and less consumer goods***	2	x
12	**D**	**Rationale** **A.** This occurs because consumers lack accurate information about the benefits of healthcare **B.** This is because healthcare leads to positive externalities **C.** This occurs because consumers lack accurate information about the (future) benefits of healthcare **D.** ***Correct: Consumers are more likely to take risks with their health if they do not have to pay for healthcare***	1	
13	**B**	**Rationale** **A.** Overall welfare is maximised at market price where both surpluses are maximised **B.** ***Correct: Overall welfare is maximised at market price where both surpluses are maximised*** **C.** Overall welfare is maximised at market price where both surpluses are maximised **D.** Overall welfare is maximised at market price where both surpluses are maximised	1	
14	**D**	**Rationale** **A.** An increase in interest rates will reduce disposable income and demand will fall **B.** A fall in demand will lead to a fall in quantity traded **C.** Interest rates do not affect price elasticity of supply **D.** **Correct: Interest rates are the cost of capital so costs of production will rise and supply will fall**	2	

15	**D**	**Rationale** **A.** Courts and prisons are provided by the government but are excludable and rival **B.** Hospitals and ambulance services are provided by both government and private sector, but are excludable and rival **C.** Rail and bus services are excludable and rival **D.** ***Correct: Street lighting and street cleaning are non-excludable and non-rival***	1	

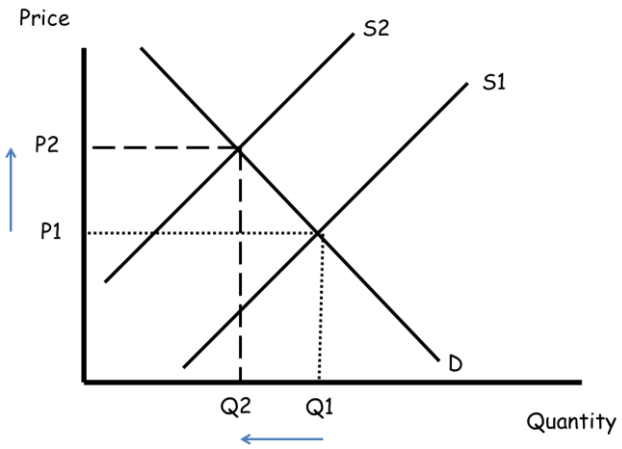
Question			Answer	Marks	Guidance
16	a		***What is meant by demand?***		
			Accept: The willingness and ability to purchase a good or service at the given price in a given time period.	1 (AO1x1)	Candidates do not need to state 'ability' or 'in a given time period'
	b	i	***Calculate the percentage of world output supplied by Mexico in 2014.***		
			Accept Total world production = 4335974 tonnes Mexico = (1520695/4335974) x 100 = 35%	4 (AO1x2) (AO2x2)	Give 1 mark for correct world production Give 1 mark for correct Mexico production Give 1 mark for the calculation Give 1 mark for the correct answer
	b	ii	***Calculate the percentage increase in avocado prices in the UK from 2009 to 2016.***		
			Price in 2009 - £0.80 Price in 2016 - £1. Increase = (20/80) x100 = 25%	2 (AO1x1) (AO2x1)	Give 1 mark for identifying the prices – allow up to +/-5p variation for reading off the graph Give 1 mark for the correct answer.

	c		***Using an appropriate diagram(s), show how consumer surplus would be affected by the imposition of a tax on avocados.***		
			Increase in price (1 mark) stated or shown on diagram. Tax will reduce consumer surplus (1 mark) Marks for diagram: Area of changed consumer surplus identified (2 marks) OR Consumer surplus before tax (1 mark) Consumer surplus after tax (1 mark)	4 (AO1x2) (AO2x2)	 Old consumer surplus P1,xX1. New consumer surplus P2,xX2 . Do not accept diagrams that shift demand curve or do not label the demand curve.
	d		***Using information from the case study, state and explain one factor that has increased world demand for avocados.***		
			Accept: Identification of a factor shifting demand (1 mark) • change in tastes\preferences or reference to advertising • change in (real) income Example from case study (1 mark) e.g. • celebrity endorsement • rise in standard of living • avocados have health benefits	2 (AO2 x2)	1 mark max for quoting from the case study

	e	i	***What is meant by 'income elasticity of demand'?***		
			Income Elasticity of Demand (YED) measures the responsiveness of quantity demanded to a change in income.	2 (AO1x2)	Award 1 mark for awareness that demand changes with income Award 1 mark for the responsiveness of demand to a change in income. Award 1 mark for %change in Qd/% change in income

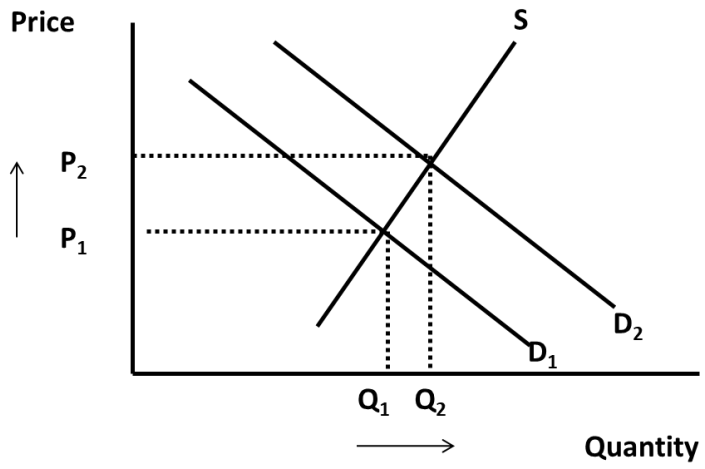
Question			Answer	Marks	Guidance
	e	ii	***Evaluate, using an appropriate calculation, the significance of income elasticity of demand for avocados from 2012 to 2017.***		
			Level 3 (7-10 marks) **Good** – **strong** analysis of the significance of income elasticity of demand (YED). **Good** analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant calculation(s) are predominantly correct and linked to the analysis. **Strong** analysis will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant calculation(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any calculations must be integral to the analysis. **Good - strong** evaluation of the significance of YED estimates, weighing up both sides/comparing alternatives. **Strong** evaluation should include a supported judgement. *There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.* **Level 2 (4-6 marks)** **Reasonable** analysis of the significance of income elasticity of demand (YED). There is correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. Any relevant calculation(s) may not be linked to the analysis. **Reasonable** evaluation of the significance of YED estimates, considering both sides/comparing alternatives.	10 (AO2x1) (AO3x4) (AO4x5)	One starting point is to calculate the income of elasticity of demand for avocados from 2012 to 2017. This is 184\20.48= +8.98. This means that the good is normal because income and QD are positively related. The estimate is elastic so it may be considered a luxury good. This figure is significant for avocado producers who should increase supply at times of rising income. In a recession there may be a relatively large fall in demand for avocados. However another factor may have a more significant effect on demand such as tastes or the price of substitutes. Candidates may also consider YED may also change at different times of the year. This is only an estimate and may be based on inaccurate\out of date information.

			There is a line of reasoning presented with some structure. The information presented is in the most part relevant and supported by some evidence. **Level 1 (1-3 marks)** **Limited** analysis based on application of knowledge and understanding of the significance of income elasticity of demand (YED). There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. Any relevant calculation(s) may not be present or are incorrect. **Limited** evaluation of the significance of YED estimates in the form of an unsupported statement **or no** evaluation. *Information is basic and communicated in an unstructured way. The information is supported by limited evidence. The relationship to the evidence may not be clear.* **0 marks** no response worthy of credit		
			Descriptor		**Award mark**
			Consistently meets the criteria for this level		At top of level
			Meets the criteria but with some slight inconsistency		Above middle and either below top of level or at middle of level (depending on number of marks available)
			Just enough achievement on balance for this level		Above bottom and either below middle or at middle of level (depending on number of marks available)
			On the borderline of this level and the one below		At bottom of level

Question			Answer	Marks	Guidance
Between 2011 and 2016 the total government subsidy provided for each university student fell from £14 000 to £10 000 per student. Evaluate, using an appropriate diagram(s), the effects of reducing the subsidy for university education.					
17			**Level 4 (16-20 marks)** **Good** knowledge and understanding of subsidies as a method of government intervention. **Strong** analysis of the effects of reducing the subsidy for university education. **Strong** analysis will have **consistently** well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. **Strong** evaluation of the effect of reducing the subsidy to university education, and a conclusion drawn weighing up both sides/comparing alternatives and reaching a supported judgement. *There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.* **Level 3 (11-15 marks)** **Good** knowledge and understanding of subsidies as a method of government intervention. **Good** analysis of the effect of reducing the subsidy for university education. There is correct analysis in the form of developed links. These links are developed through a chain of reasoning which addresses the question. The relevant diagram(s) are present, predominantly correct and linked to the analysis.	20 (AO1x3) (AO2x4) (AO3x6) (AO4x7)	Candidates may argue that the effect of a fall in the subsidy would be to increase costs of providing a university degree. This would reduce supply leading to a rise in price, a contraction in demand and a fall in equilibrium quantity of university education. It is possible, though not necessary, for candidates to consider education as a merit good which will be under-consumed because consumers do not have full information about its benefits. Candidates can clearly illustrate on a diagram the effect of a decrease in a subsidy showing • Leftward shift in supply curve • Old and new market equilibrium 

			Good evaluation of the effect of reducing the subsidy for university education weighing up both sides/comparing alternatives but without reaching a supported judgement. *There is a line of reasoning presented with some structure. The information presented is in the most part relevant and supported by some evidence.* **Level 2 (6-10 marks)** **Reasonable** knowledge and understanding of subsidies as a method of government intervention. **Reasonable** analysis of the effect of reducing the subsidy for university education. There is correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. The relevant diagram(s), if present, may be imperfectly labelled or not linked to the analysis. **Reasonable** evaluation of the effect of reducing the subsidy for university education considering both sides/comparing alternatives. *The information has some relevance and is presented with limited structure. The information is supported by limited evidence.* **Level 1 (1-5 marks)** **Limited** knowledge and understanding of subsidies as a method of government intervention. **Limited or no** analysis of the effect of reducing the subsidy for university education. There is little evidence of reasoning that addresses the question asked. There is a		The effect of fall in the subsidy is to reduce supply from S1 to S2. This is because higher production cost mean less can be supplied at any given price. As a results of higher production costs, price rises from P1 to P2, there is a contraction in demand and the new market equilibrium is at Q2. Costs of reducing subsidy might also include: • Increased inequality (less access to those from lower income households) • Reduced positive externalities e.g. lower productivity • Increased under-consumption of a merit good Evaluation should consider the benefits of reducing a subsidy in terms of reduced 'opportunity cost' of subsidies to the government allowing more state provision in other areas such as health and other areas of education. The administration costs of subsidy may also be reduced Student may be more selective in their choice of course due to higher relative opportunity cost of not working The overall effect on consumption of university education will depend upon the PED. Inelastic PED will mean the reduction in subsidy will have little effect on the quantity consumed of university education. Candidates may also consider • The size of the reduction in subsidy in relation to the overall cost of education. • University's reaction to the change in subsidy e.g. do they pass this reduction on to the student in terms of higher fees. Other factors apart from price may be important in making choices about education. A significant benefit would be that students are more selective in terms of

			lack of a clear structure. The relevant diagram(s) may not be present or incorrectly labelled. **Limited** evaluation of the effect of reducing the subsidy for university education in the form of an unsupported statement or **no** evaluation. *Information is basic and communicated in an unstructured way. The information is supported by limited evidence. The relationship to the evidence may not be clear.* **0 marks** no response worthy of credit		subject choice due to the rise in cost of university education.
			Descriptor		**Award mark**
			Consistently meets the criteria for this level		At top of level
			Meets the criteria but with some slight inconsistency		Above middle and either below top of level or at middle of level (depending on number of marks available)
			Meets most of the criteria with some inconsistencies		Middle of level
			Just enough achievement on balance for this level		Above bottom and either below middle or at middle of level (depending on number of marks available)
			On the borderline of this level and the one below		At bottom of level

Question	Answer	Marks	Guidance
In 2014 the soft drinks manufacturer Coca Cola spent over $3 billion on global advertising. Evaluate, using an appropriate diagram(s), the effect of increased advertising on the market for Coca Cola products.			
18	**Level 4 (16-20 marks)** **Good** knowledge and understanding of the effect of advertising on a market. **Strong** analysis of the effect of advertising on a market. **Strong** analysis will have **consistently** well-developed links through a coherent chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis. **Strong** evaluation of the effect of advertising on a market, and a conclusion drawn weighing up both sides/comparing alternatives and reaching a supported judgement. *There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.* **Level 3 (11-15 marks)** **Good** knowledge and understanding of the effect of advertising on a market. **Good** analysis of the effect of advertising on a market. There is correct analysis in the form of developed links. These links are developed through a chain of reasoning	20 (AO1x3) (AO2x4) (AO3x6) (AO4x7)	Candidates may argue that a rise in advertising will lead to an increase in demand for Coca Cola because of a change in consumer tastes. This will lead to a rise in price, an extension in supply and an increase in equilibrium quantity of Coca Cola consumed. Candidates can clearly illustrate on a diagram the effect of an increase in advertising expenditure • Rightward shift in the demand curve • Old and new market equilibrium  The effect of an increase in advertising expenditure is to increase demand from D1 to D2. Price rises from P1 to P2, there is an extension in supply and the new market equilibrium quantity is at Q2.

			which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. **Good** evaluation of the effect of advertising on a market and a conclusion drawn weighing up both sides/comparing alternatives but without reaching a supported judgement. *There is a line of reasoning presented with some structure. The information presented is in the most part relevant and supported by some evidence.* **Level 2 (6-10 marks)** **Reasonable** knowledge and understanding of the effect of advertising on a market. **Reasonable** analysis of the effect on the effect of advertising on a market. There is correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. The relevant diagram(s), if present, may be imperfectly labelled or not linked to the analysis. **Reasonable** evaluation of advertising on a market considering both sides/comparing alternatives. *The information has some relevance and is presented with limited structure. The information is supported by limited evidence.* **Level 1 (1-5 marks)** **Limited** knowledge and understanding of the effect of advertising on a market.		Successful advertising will increase brand loyalty making PED more inelastic. Advertising may not have such a positive impact on the market for a number of reasons which may include: The size of the increase in price and sales will depend upon: The PES i.e. if inelastic there will be a much larger rise in P and vice versa if elastic. The impact on price and quantity will also depend on the effectiveness of the advertising campaign which may change over time due to response of competitors. Candidates may also consider an alternative outcome by considering the effect of a rise in advertising expenditure on the costs of production and therefore supply. This will lead to a rise in price, a contraction in demand and a fall in equilibrium quantity of coca cola sold. The overall effect on the market for coca cola will depend on the increase in revenue relative to costs. Candidates may consider other factors which will affect demand for the product e.g. price of substitutes, income.

			Limited or no analysis of the effect of advertising on a market. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or incorrectly labelled. **Limited** evaluation of the effect of advertising on a market in the form of an unsupported statement or **no** evaluation. *Information is basic and communicated in an unstructured way. The information is supported by limited evidence. The relationship to the evidence may not be clear.* **0 marks** no response worthy of credit		

Descriptor	**Award mark**
Consistently meets the criteria for this level	At top of level
Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Meets most of the criteria with some inconsistencies	Middle of level
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
On the borderline of this level and the one below	At bottom of level

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