

Section 1: Microeconomics

1.1 Competitive markets: Demand and supply

Sub-topic	SL/HL core	HL
Markets		
The nature of markets	<ul style="list-style-type: none"> Outline the meaning of the term market. 	
Demand		
The law of demand	<ul style="list-style-type: none"> Explain the negative causal relationship between price and quantity demanded. Describe the relationship between an individual consumer's demand and market demand. 	
The demand curve	<ul style="list-style-type: none"> Explain that a demand curve represents the relationship between the price and the quantity demanded of a product, <i>ceteris paribus</i>. Draw a demand curve. 	
The non-price determinants of demand (factors that change demand or shift the demand curve)	<ul style="list-style-type: none"> Explain how factors including changes in income (in the cases of normal and inferior goods), preferences, prices of related goods (in the cases of substitutes and complements) and demographic changes may change demand. 	
Movements along and shifts of the demand curve	<ul style="list-style-type: none"> Distinguish between movements along the demand curve and shifts of the demand curve. Draw diagrams to show the difference between movements along the demand curve and shifts of the demand curve. 	

Sub-topic	SL/HL core	HL
Linear demand functions (equations), demand schedules and graphs		<ul style="list-style-type: none"> Explain a demand function (equation) of the form $Q_d = a - bP$. Plot a demand curve from a linear function (eg. $Q_d = 60 - 5P$). Identify the slope of the demand curve as the slope of the demand function $Q_d = a - bP$, that is $-b$ (the coefficient of P). Outline why, if the "a" term changes, there will be a shift of the demand curve. Outline how a change in "b" affects the steepness of the demand curve.
Supply		
The law of supply	<ul style="list-style-type: none"> Explain the positive causal relationship between price and quantity supplied. Describe the relationship between an individual producer's supply and market supply. 	
The supply curve	<ul style="list-style-type: none"> Explain that a supply curve represents the relationship between the price and the quantity supplied of a product, <i>ceteris paribus</i>. Draw a supply curve. 	
The non-price determinants of supply (factors that change supply or shift the supply curve)	<ul style="list-style-type: none"> Explain how factors including changes in costs of factors of production (land, labour, capital and entrepreneurship), technology, prices of related goods (joint/competitive supply), expectations, indirect taxes and subsidies and the number of firms in the market can change supply. 	

Sub-topic	SL/HL core	HL
Movements along and shifts of the supply curve	<ul style="list-style-type: none"> Distinguish between movements along the supply curve and shifts of the supply curve. Construct diagrams to show the difference between movements along the supply curve and shifts of the supply curve. 	
Linear supply functions, equations and graphs		<ul style="list-style-type: none"> Explain a supply function (equation) of the form $Q_s = c + dP$. Plot a supply curve from a linear function (eg. $Q_s = -30 + 20P$). Identify the slope of the supply curve as the slope of the supply function $Q_s = c + dP$, that is d (the coefficient of P). Outline why, if the "c" term changes, there will be a shift of the supply curve. Outline how a change in "d" affects the steepness of the supply curve.
Market equilibrium		
Equilibrium and changes to equilibrium	<ul style="list-style-type: none"> Explain, using diagrams, how demand and supply interact to produce market equilibrium. Analyse, using diagrams and with reference to excess demand or excess supply, how changes in the determinants of demand and/or supply result in a new market equilibrium. 	
Calculating and illustrating equilibrium using linear equations		<ul style="list-style-type: none"> Calculate the equilibrium price and equilibrium quantity from linear demand and supply functions. Plot demand and supply curves from linear functions, and identify the equilibrium price and equilibrium quantity. State the quantity of excess demand or excess supply in the above diagrams.

Sub-topic	SL/HL core	HL
The role of the price mechanism		
Resource allocation	<ul style="list-style-type: none"> Explain why scarcity necessitates choices that answer the "What to produce?" question. Explain why choice results in an opportunity cost. Explain, using diagrams, that price has a signalling function and an incentive function, which result in a reallocation of resources when prices change as a result of a change in demand or supply conditions. 	
Market efficiency		
Consumer surplus	<ul style="list-style-type: none"> Explain the concept of consumer surplus. Identify consumer surplus on a demand and supply diagram. 	
Producer surplus	<ul style="list-style-type: none"> Explain the concept of producer surplus. Identify producer surplus on a demand and supply diagram. 	
Allocative efficiency	<ul style="list-style-type: none"> Explain that the best allocation of resources from society's point of view is at competitive market equilibrium, where social (community) surplus (consumer surplus and producer surplus) is maximized (marginal benefit = marginal cost). 	
<p>Theory of knowledge: potential connections</p> <p>To what extent is it true to say that a demand curve is a fictional entity?</p> <p>What assumptions underlie the law of demand? Are these assumptions likely to be true? Does it matter if these assumptions are actually false?</p>		

1.2 Elasticity

Sub-topic	SL/HL core	HL
Price elasticity of demand (PED)		
Price elasticity of demand and its determinants	<ul style="list-style-type: none"> Explain the concept of price elasticity of demand, understanding that it involves responsiveness of quantity demanded to a change in price, along a given demand curve. Calculate PED using the following equation. $PED = \frac{\text{percentage change in quantity demanded}}{\text{percentage change in price}}$ State that the PED value is treated as if it were positive although its mathematical value is usually negative. Explain, using diagrams and PED values, the concepts of price elastic demand, price inelastic demand, unit elastic demand, perfectly elastic demand and perfectly inelastic demand. Explain the determinants of PED, including the number and closeness of substitutes, the degree of necessity, time and the proportion of income spent on the good. Calculate PED between two designated points on a demand curve using the PED equation above. Explain why PED varies along a straight line demand curve and is not represented by the slope of the demand curve. 	
Applications of price elasticity of demand	<ul style="list-style-type: none"> Examine the role of PED for firms in making decisions regarding price changes and their effect on total revenue. Explain why the PED for many primary commodities is relatively low and the PED for manufactured products is relatively high. Examine the significance of PED for government in relation to indirect taxes. 	
Cross price elasticity of demand (XED)		
Cross price elasticity of demand and its determinants	<ul style="list-style-type: none"> Outline the concept of cross price elasticity of demand, understanding that it involves responsiveness of demand for one good (and hence a shifting demand curve) to a change in the price of another good. Calculate XED using the following equation. $XED = \frac{\text{percentage change in quantity demanded of good x}}{\text{percentage change in price of good y}}$ Show that substitute goods have a positive value of XED and complementary goods have a negative value of XED. Explain that the (absolute) value of XED depends on the closeness of the relationship between two goods. 	

Sub-topic	SL/HL core	HL
Applications of cross price elasticity of demand	<ul style="list-style-type: none"> Examine the implications of XED for businesses if prices of substitutes or complements change. 	
Income elasticity of demand (YED)		
Income elasticity of demand and its determinants	<ul style="list-style-type: none"> Outline the concept of income elasticity of demand, understanding that it involves responsiveness of demand (and hence a shifting demand curve) to a change in income. Calculate YED using the following equation. $YED = \frac{\text{percentage change in quantity demanded}}{\text{percentage change in income}}$ Show that normal goods have a positive value of YED and inferior goods have a negative value of YED. Distinguish, with reference to YED, between necessity (income inelastic) goods and luxury (income elastic) goods. 	
Applications of income elasticity of demand	<ul style="list-style-type: none"> Examine the implications for producers and for the economy of a relatively low YED for primary products, a relatively higher YED for manufactured products and an even higher YED for services. 	
Price elasticity of supply (PES)		
Price elasticity of supply and its determinants	<ul style="list-style-type: none"> Explain the concept of price elasticity of supply, understanding that it involves responsiveness of quantity supplied to a change in price along a given supply curve. Calculate PES using the following equation. $PES = \frac{\text{percentage change in quantity supplied}}{\text{percentage change in price}}$ Explain, using diagrams and PES values, the concepts of elastic supply, inelastic supply, unit elastic supply, perfectly elastic supply and perfectly inelastic supply. Explain the determinants of PES, including time, mobility of factors of production, unused capacity and ability to store stocks. 	
Applications of price elasticity of supply	<ul style="list-style-type: none"> Explain why the PES for primary commodities is relatively low and the PES for manufactured products is relatively high. 	

1.3 Government intervention

Sub-topic	SL/HL core	HL
Indirect taxes	<ul style="list-style-type: none"> Explain why governments impose indirect (excise) taxes. Distinguish between specific and <i>ad valorem</i> taxes. Draw diagrams to show specific and <i>ad valorem</i> taxes, and analyse their impacts on market outcomes. Discuss the consequences of imposing an indirect tax on the stakeholders in a market, including consumers, producers and the government. 	<ul style="list-style-type: none"> Explain, using diagrams, how the incidence of indirect taxes on consumers and firms differs, depending on the price elasticity of demand and on the price elasticity of supply. Plot demand and supply curves for a product from linear functions and then illustrate and/or calculate the effects of the imposition of a specific tax on the market (on price, quantity, consumer expenditure, producer revenue, government revenue, consumer surplus and producer surplus).
Tax incidence and price elasticity of demand and supply		
Subsidies		
Impact on markets	<ul style="list-style-type: none"> Explain why governments provide subsidies, and describe examples of subsidies. Draw a diagram to show a subsidy, and analyse the impacts of a subsidy on market outcomes. Discuss the consequences of providing a subsidy on the stakeholders in a market, including consumers, producers and the government. 	<ul style="list-style-type: none"> Plot demand and supply curves for a product from linear functions and then illustrate and/or calculate the effects of the provision of a subsidy on the market (on price, quantity, consumer expenditure, producer revenue, government expenditure, consumer surplus and producer surplus).

Sub-topic	SL/HL core	HL
Price controls		
Price ceilings (maximum prices); rationing, consequences and examples	<ul style="list-style-type: none"> Explain why governments impose price ceilings, and describe examples of price ceilings, including food price controls and rent controls. Draw a diagram to show a price ceiling, and analyse the impacts of a price ceiling on market outcomes. Examine the possible consequences of a price ceiling, including shortages, inefficient resource allocation, welfare impacts, underground parallel markets and non-price rationing mechanisms. Discuss the consequences of imposing a price ceiling on the stakeholders in a market, including consumers, producers and the government. 	<ul style="list-style-type: none"> Calculate possible effects from the price ceiling diagram, including the resulting shortage and the change in consumer expenditure (which is equal to the change in firm revenue).
Price floors (minimum prices); rationing, consequences and examples	<ul style="list-style-type: none"> Explain why governments impose price floors, and describe examples of price floors, including price support for agricultural products and minimum wages. Draw a diagram of a price floor, and analyse the impacts of a price floor on market outcomes. Examine the possible consequences of a price floor, including surpluses and government measures to dispose of the surpluses, inefficient resource allocation and welfare impacts. Discuss the consequences of imposing a price floor on the stakeholders in a market, including consumers, producers and the government. 	<ul style="list-style-type: none"> Calculate possible effects from the price floor diagram, including the resulting surplus, the change in consumer expenditure, the change in producer revenue, and government expenditure to purchase the surplus.

<p>Theory of knowledge: potential connections In what sense are we morally obliged to pay taxes? Is this the result of a promise that we have made ourselves? When was this promise made? (Make a distinction here between moral and legal obligations)</p> <p>To what extent is government morally obliged to provide healthcare and welfare benefits to the unemployed?</p>

1.4 Market failure

Sub-topic	SL/HL core	HL
<p>The meaning of market failure</p> <p>Market failure as a failure to allocate resources efficiently</p> <ul style="list-style-type: none"> Analyse the concept of market failure as a failure of the market to achieve allocative efficiency, resulting in an over-allocation of resources (over-provision of a good) or an under-allocation of resources (under-provision of a good) 		
<p>Types of market failure</p>		
The meaning of externalities	<ul style="list-style-type: none"> Describe the concepts of marginal private benefits (MPB), marginal social benefits (MSB), marginal private costs (MPC) and marginal social costs (MSC). Describe the meaning of externalities as the failure of the market to achieve a social optimum where $MSB = MSC$. 	
Negative externalities of production and consumption	<ul style="list-style-type: none"> Explain, using diagrams and examples, the concepts of negative externalities of production and consumption, and the welfare loss associated with the production or consumption of a good or service. Explain that demerit goods are goods whose consumption creates external costs. 	

Sub-topic	SL/HL core	HL
	<ul style="list-style-type: none"> Evaluate, using diagrams, the use of policy responses, including market-based policies (taxation and tradable permits), and government regulations, to the problem of negative externalities of production and consumption 	
Positive externalities of production and consumption	<ul style="list-style-type: none"> Explain, using diagrams and examples, the concepts of positive externalities of production and consumption, and the welfare loss associated with the production or consumption of a good or service. Explain that merit goods are goods whose consumption creates external benefits. Evaluate, using diagrams, the use of government responses, including subsidies, legislation, advertising to influence behaviour, and direct provision of goods and services. 	
Lack of public goods	<ul style="list-style-type: none"> Using the concepts of rivalry and excludability, and providing examples, distinguish between public goods (non-rivalrous and non-excludable) and private goods (rivalrous and excludable). Explain, with reference to the free rider problem, how the lack of public goods indicates market failure. Discuss the implications of the direct provision of public goods by government. 	

Sub-topic	SL/HL core	HL
Common access resources and the threat to sustainability	<ul style="list-style-type: none"> Describe, using examples, common access resources. Describe sustainability. Explain that the lack of a pricing mechanism for common access resources means that these goods may be overused/depleted/degraded as a result of activities of producers and consumers who do not pay for the resources that they use, and that this poses a threat to sustainability. Explain, using negative externalities diagrams, that economic activity requiring the use of fossil fuels to satisfy demand poses a threat to sustainability. Explain that the existence of poverty in economically less developed countries creates negative externalities through over-exploitation of land for agriculture, and that this poses a threat to sustainability. Evaluate, using diagrams, possible government responses to threats to sustainability, including legislation, carbon taxes, cap and trade schemes, and funding for clean technologies. Explain, using examples, that government responses to threats to sustainability are limited by the global nature of the problems and the lack of ownership of common access resources, and that effective responses require international cooperation. 	

Sub-topic	SL/HL core	HL
Asymmetric information		<ul style="list-style-type: none"> Explain, using examples, that market failure may occur when one party in an economic transaction (either the buyer or the seller) possesses more information than the other party. Evaluate possible government responses, including legislation, regulation and provision of information.
Abuse of monopoly power		<ul style="list-style-type: none"> Explain how monopoly power can create a welfare loss and is therefore a type of market failure. Discuss possible government responses, including legislation, regulation, nationalization and trade liberalization.

Theory of knowledge: potential connections

To what extent is the obligation to seek sustainable modes of consumption a moral one?

What knowledge issues are involved in assessing the role of technology in meeting future patterns of consumption and decreasing the negative externalities of consumption associated with fossil fuels?

What are the knowledge issues involved in determining what is a rational cost to pay for halting climate change?

How could we know if economically more developed countries are morally justified in interfering in the development of economically less developed countries on the grounds of climate change?

How can we know when climate change is sufficiently serious to warrant government interfering in the freedom of its citizens to consume?

How can we calculate the external costs of producing and running items such as light bulbs or motor vehicles? For example, low energy light bulbs consume less energy but they require more energy to produce, and some brands contain materials that are harmful to the environment such as mercury. Hybrid cars consume less energy to run but consume more energy to produce.

What are the problems in knowing whether climate change is produced by human activity?

1.5 Theory of the firm and market structures (HL only)

Sub-topic	SL/HL core	HL
Production and costs		
Production in the short run: the law of diminishing returns		<ul style="list-style-type: none"> Distinguish between the short run and long run in the context of production. Define total product, average product and marginal product, and construct diagrams to show their relationship. Explain the law of diminishing returns. Calculate total, average and marginal product from a set of data and/or diagrams.
Costs of production: economic costs		<ul style="list-style-type: none"> Explain the meaning of economic costs as the opportunity cost of all resources employed by the firm (including entrepreneurship). Distinguish between explicit costs and implicit costs as the two components of economic costs.
Costs of production in the short run		<ul style="list-style-type: none"> Explain the distinction between the short run and the long run, with reference to fixed costs and variable costs. Distinguish between total costs, marginal costs and average costs. Draw diagrams illustrating the relationship between marginal costs and average costs, and explain the connection with production in the short run.

Sub-topic	SL/HL core	HL
		<ul style="list-style-type: none"> Explain the relationship between the product curves (average product and marginal product) and the cost curves (average variable cost and marginal cost), with reference to the law of diminishing returns. Calculate total fixed costs, total variable costs, total costs, average fixed costs, average variable costs, average total costs and marginal costs from a set of data and/or diagrams.
Production in the long run: returns to scale		<ul style="list-style-type: none"> Distinguish between increasing returns to scale, decreasing returns to scale and constant returns to scale.
Costs of production in the long run		<ul style="list-style-type: none"> Outline the relationship between short-run average costs and long-run average costs. Explain, using a diagram, the reason for the shape of the long-run average total cost curve. Describe factors giving rise to economies of scale, including specialization, efficiency, marketing and indivisibilities. Describe factors giving rise to diseconomies of scale, including problems of coordination and communication.
Revenues		
Total revenue, average revenue and marginal revenue		<ul style="list-style-type: none"> Distinguish between total revenue, average revenue and marginal revenue. Illustrate, using diagrams, the relationship between total revenue, average revenue and marginal revenue. Calculate total revenue, average revenue and marginal revenue from a set of data and/or diagrams.

Sub-topic	SL/HL core	HL
Profit Economic profit (sometimes known as supernormal profit or abnormal profit) and normal profit (zero economic profit occurring at the break-even point)		<ul style="list-style-type: none"> Describe economic profit as the case where total revenue exceeds economic cost. Describe normal profit as the amount of revenue needed to cover the costs of employing self-owned resources (implicit costs, including entrepreneurship) or the amount of revenue needed to just keep the firm in business. Explain that economic profit is profit over and above normal profit, and that the firm earns normal profit when economic profit is zero. Explain why a firm will continue to operate even when it earns zero economic profit. Explain the meaning of loss as negative economic profit arising when total revenue is less than total cost. Calculate different profit levels from a set of data and/or diagrams.
Goals of firms		
Profit maximization		<ul style="list-style-type: none"> Explain the goal of profit maximization where the difference between total revenue and total cost is maximized or where marginal revenue equals marginal cost.
Alternative goals of firms		<ul style="list-style-type: none"> Describe alternative goals of firms, including revenue maximization, growth maximization, satisfying and maximizing, and corporate social responsibility.
Perfect competition		
Assumptions of the model		<ul style="list-style-type: none"> Describe, using examples, the assumed characteristics of perfect competition: a large number of firms; a homogeneous product; freedom of entry and exit; perfect information; perfect resource mobility.

Sub-topic	SL/HL core	HL
Revenue curves		<ul style="list-style-type: none"> Explain, using a diagram, the shape of the perfectly competitive firm's average revenue and marginal revenue curves, indicating that the assumptions of perfect competition imply that each firm is a price taker. Explain, using a diagram, that the perfectly competitive firm's average revenue and marginal revenue curves are derived from market equilibrium for the industry.
Profit maximization in the short run		<ul style="list-style-type: none"> Explain, using diagrams, that it is possible for a perfectly competitive firm to make economic profit (supernormal profit), normal profit or negative economic profit in the short run based on the marginal cost and marginal revenue profit maximization rule.
Profit maximization in the long run		<ul style="list-style-type: none"> Explain, using a diagram, why, in the long run, a perfectly competitive firm will make normal profit. Explain, using a diagram, how a perfectly competitive market will move from short-run equilibrium to long-run equilibrium.
Shut-down price and break-even price		<ul style="list-style-type: none"> Distinguish between the short run shut-down price and the break-even price. Explain, using a diagram, when a loss-making firm would shut down in the short run. Explain, using a diagram, when a loss-making firm would shut down and exit the market in the long run. Calculate the short run shut-down price and the break-even price from a set of data

Sub-topic	SL/HL core	HL
Efficiency		<ul style="list-style-type: none"> Explain the meaning of the term allocative efficiency. Explain that the condition for allocative efficiency is $P = MC$ (or, with externalities, $MSB = MSC$). Explain, using a diagram, why a perfectly competitive market leads to allocative efficiency in both the short run and the long run. Explain the meaning of the term productive/technical efficiency. Explain that the condition for productive efficiency is that production takes place at minimum average total cost. Explain, using a diagram, why a perfectly competitive firm will be productively efficient in the long run, though not necessarily in the short run.
Monopoly		
Assumptions of the model		<ul style="list-style-type: none"> Describe, using examples, the assumed characteristics of a monopoly: a single or dominant firm in the market; no close substitutes; significant barriers to entry.
Barriers to entry		<ul style="list-style-type: none"> Describe, using examples, barriers to entry, including economies of scale, branding and legal barriers.
Revenue curves		<ul style="list-style-type: none"> Explain that the average revenue curve for a monopolist is the market demand curve, which will be downward sloping. Explain, using a diagram, the relationship between demand, average revenue and marginal revenue in a monopoly. Explain why a monopolist will never choose to operate on the inelastic portion of its average revenue curve.

Sub-topic	SL/HL core	HL
Profit maximization		<ul style="list-style-type: none"> Explain, using a diagram, the short- and long-run equilibrium output and pricing decision of a profit maximizing (loss minimizing) monopolist, identifying the firm's economic profit (or losses). Explain the role of barriers to entry in permitting the firm to earn economic profit.
Revenue maximization		<ul style="list-style-type: none"> Explain, using a diagram, the output and pricing decision of a revenue maximizing monopoly firm. Compare and contrast, using a diagram, the equilibrium positions of a profit maximizing monopoly firm and a revenue maximizing monopoly firm. Calculate from a set of data and/or diagrams the revenue maximizing level of output.
Natural monopoly		<ul style="list-style-type: none"> With reference to economies of scale, and using examples, explain the meaning of the term "natural monopoly". Draw a diagram illustrating a natural monopoly.
Monopoly and efficiency		<ul style="list-style-type: none"> Explain, using diagrams, why the profit maximizing choices of a monopoly firm lead to allocative inefficiency (welfare loss) and productive inefficiency. Explain why, despite inefficiencies, a monopoly may be considered desirable for a variety of reasons, including the ability to finance research and development (R&D) from economic profits, the need to innovate to maintain economic profit, and the possibility of economies of scale.

Sub-topic	SL/HL core	HL
Policies to regulate monopoly power		<ul style="list-style-type: none"> Evaluate the role of legislation and regulation in reducing monopoly power.
The advantages and disadvantages of monopoly compared with perfect competition		<ul style="list-style-type: none"> Draw diagrams and use them to compare and contrast a monopoly market with a perfectly competitive market, with reference to factors including efficiency, price and output, research and development (R&D) and economies of scale.
Monopolistic competition		
Assumptions of the model		<ul style="list-style-type: none"> Describe, using examples, the assumed characteristics of a monopolistic competition: a large number of firms; differentiated products; absence of barriers to entry and exit.
Revenue curves		<ul style="list-style-type: none"> Explain that product differentiation leads to a small degree of monopoly power and therefore to a negatively sloping demand curve for the product.
Profit maximization in the short run		<ul style="list-style-type: none"> Explain, using a diagram, the short-run equilibrium output and pricing decisions of a profit maximizing (loss minimizing) firm in monopolistic competition, identifying the firm's economic profit (or loss).
Profit maximization in the long run		<ul style="list-style-type: none"> Explain, using diagrams, why in the long run a firm in monopolistic competition will make normal profit.
Non-price competition		<ul style="list-style-type: none"> Distinguish between price competition and non-price competition. Describe examples of non-price competition, including advertising, packaging, product development and quality of service.

Sub-topic	SL/HL core	HL
Monopolistic competition and efficiency		<ul style="list-style-type: none"> Explain, using a diagram, why neither allocative efficiency nor productive efficiency are achieved by monopolistically competitive firms.
Monopolistic competition compared with perfect competition and monopoly		<ul style="list-style-type: none"> Compare and contrast, using diagrams, monopolistic competition with perfect competition, and monopolistic competition with monopoly, with reference to factors including short run, long run, market power, allocative and productive efficiency, number of producers, economies of scale, ease of entry and exit, size of firms and product differentiation.
Oligopoly		
Assumptions of the model		<ul style="list-style-type: none"> Describe, using examples, the assumed characteristics of an oligopoly: the dominance of the industry by a small number of firms; the importance of interdependence; differentiated or homogeneous products; high barriers to entry. Explain why interdependence is responsible for the dilemma faced by oligopolistic firms—whether to compete or to collude. Explain how a concentration ratio may be used to identify an oligopoly.
Game theory		<ul style="list-style-type: none"> Explain how game theory (the simple prisoner's dilemma) can illustrate strategic interdependence and the options available to oligopolies.

Sub-topic	SL/HL core	HL
Open/formal collusion		<ul style="list-style-type: none"> Explain the term "collusion", give examples, and state that it is usually (in most countries) illegal. Explain the term "cartel". Explain that the primary goal of a cartel is to limit competition between member firms and to maximize joint profits as if the firms were collectively a monopoly. Explain the incentive of cartel members to cheat. Analyse the conditions that make cartel structures difficult to maintain.
Tacit/informal collusion		<ul style="list-style-type: none"> Describe the term "tacit collusion", including reference to price leadership by a dominant firm.
Non-collusive oligopoly		<ul style="list-style-type: none"> Explain that the behaviour of firms in a non-collusive oligopoly is strategic in order to take account of possible actions by rivals. Explain, using a diagram, the existence of price rigidities, with reference to the kinked demand curve. Explain why non-price competition is common in oligopolistic markets, with reference to the risk of price wars. Describe, using examples, types of non-price competition.
Price discrimination		
Necessary conditions for the practice of price discrimination		<ul style="list-style-type: none"> Describe price discrimination as the practice of charging different prices to different consumer groups for the same product, where the price difference is not justified by differences in cost.

Sub-topic	SL/HL core	HL
		<ul style="list-style-type: none"> Explain that price discrimination may only take place if all of the following conditions exist: the firm must possess some degree of market power; there must be groups of consumers with differing price elasticities of demand for the product; the firm must be able to separate groups to ensure that no resale of the product occurs. Draw a diagram to illustrate how a firm maximizes profit in third degree price discrimination, explaining why the higher price is set in the market with the relatively more inelastic demand.

Theory of knowledge: potential connections

Is it rational to take into account costs already incurred in deciding whether a business venture should be terminated or whether it should receive more funds?

How can we know how to determine the balance of government policy between promoting competition in the interest of the consumer and allowing profitability in the interest of firms?

Section 2: Macroeconomics

2.1 The level of overall economic activity

Sub-topic	SL/HL core	HL
Economic activity		
The circular flow of income model		<ul style="list-style-type: none"> Describe, using a diagram, the circular flow of income between households and firms in a closed economy with no government. Identify the four factors of production and their respective payments (rent, wages, interest and profit) and explain that these constitute the income flow in the model.

Sub-topic	SL/HL core	HL
	<ul style="list-style-type: none"> Outline that the income flow is numerically equivalent to the expenditure flow and the value of output flow. Describe, using a diagram, the circular flow of income in an open economy with government and financial markets, referring to leakages/withdrawals (savings, taxes and import expenditure) and injections (investment, government expenditure and export revenue). Explain how the size of the circular flow will change depending on the relative size of injections and leakages. 	
Measures of economic activity: gross domestic product (GDP), and gross national product (GNP) or gross national income (GNI)	<ul style="list-style-type: none"> Distinguish between GDP and GNP/GNI as measures of economic activity. Distinguish between the nominal value of GDP and GNP/GNI and the real value of GDP and GNP/GNI. Distinguish between total GDP and GNP/GNI and per capita GDP and GNP/GNI. Examine the output approach, the income approach and the expenditure approach when measuring national income. Evaluate the use of national income statistics, including their use for making comparisons over time, their use for making comparisons between countries and their use for making conclusions about standards of living. Explain the meaning and significance of "green GDP", a measure of GDP that accounts for environmental destruction. 	<ul style="list-style-type: none"> Calculate nominal GDP from sets of national income data, using the expenditure approach. Calculate GNP/GNI from data Calculate real GDP, using a price deflator.

Sub-topic	SL/HL core	HL
The business cycle		
Short-term fluctuations and long-term trend	<ul style="list-style-type: none"> Explain, using a business cycle diagram, that economies typically tend to go through a cyclical pattern characterized by the phases of the business cycle. Explain the long-term growth trend in the business cycle diagram as the potential output of the economy. Distinguish between a decrease in GDP and a decrease in GDP growth. 	

Theory of knowledge: potential connections
 What is the empirical evidence for the existence of the business cycle? How do we decide whether this evidence is sufficient?

2.2 Aggregate demand and aggregate supply

Sub-topic	SL/HL core	HL
Aggregate demand (AD)		
The AD curve	<ul style="list-style-type: none"> Distinguish between the microeconomic concept of demand for a product and the macroeconomic concept of aggregate demand. Construct an aggregate demand curve. Explain why the AD curve has a negative slope. 	
The components of AD	<ul style="list-style-type: none"> Describe consumption, investment, government spending and net exports as the components of aggregate demand. 	

Sub-topic	SL/HL core	HL
The determinants of AD or causes of shifts in the AD curve	<ul style="list-style-type: none"> Explain how the AD curve can be shifted by changes in consumption due to factors including changes in consumer confidence, interest rates, wealth, personal income taxes (and hence disposable income) and level of household indebtedness. Explain how the AD curve can be shifted by changes in investment due to factors including interest rates, business confidence, technology, business taxes and the level of corporate indebtedness. Explain how the AD curve can be shifted by changes in government spending due to factors including political and economic priorities. Explain how the AD curve can be shifted by changes in net exports due to factors including the income of trading partners, exchange rates and changes in the level of protectionism. 	
Aggregate supply (AS)		
The meaning of aggregate supply	<ul style="list-style-type: none"> Describe the term aggregate supply. Explain, using a diagram, why the short-run aggregate supply curve (SRAS curve) is upward sloping. Explain, using a diagram, how the AS curve in the short run (SRAS) can shift due to factors including changes in resource prices, changes in business taxes and subsidies and supply shocks. 	

Sub-topic	SL/HL core	HL
Alternative views of aggregate supply	<ul style="list-style-type: none"> Explain, using a diagram, that the monetarist/new classical model of the long-run aggregate supply curve (LRAS) is vertical at the level of potential output (full employment output) because aggregate supply in the long run is independent of the price level. Explain, using a diagram, that the Keynesian model of the aggregate supply curve has three sections because of “wage/price” downward inflexibility and different levels of spare capacity in the economy. 	
Shifting the aggregate supply curve over the long term	<ul style="list-style-type: none"> Explain, using the two models above, how factors leading to changes in the quantity and/or quality of factors of production (including improvements in efficiency, new technology, reductions in unemployment, and institutional changes) can shift the aggregate supply curve over the long term. 	
Equilibrium		
Short-run equilibrium	<ul style="list-style-type: none"> Explain, using a diagram, the determination of short-run equilibrium, using the SRAS curve. Examine, using diagrams, the impacts of changes in short-run equilibrium. 	

Sub-topic	SL/HL core	HL
Equilibrium in the monetarist/new classical model	<ul style="list-style-type: none"> Explain, using a diagram, the determination of long-run equilibrium, indicating that long-run equilibrium occurs at the full employment level of output. Explain why, in the monetarist/new classical approach, while there may be short-term fluctuations in output, the economy will always return to the full employment level of output in the long run. Examine, using diagrams, the impacts of changes in the long-run equilibrium. 	
Equilibrium in the Keynesian model	<ul style="list-style-type: none"> Explain, using the Keynesian AD/AS diagram, that the economy may be in equilibrium at any level of real output where AD intersects AS. Explain, using a diagram, that if the economy is in equilibrium at a level of real output below the full employment level of output, then there is a deflationary (recessionary) gap. Discuss why, in contrast to the monetarist/new classical model, the economy can remain stuck in a deflationary (recessionary) gap in the Keynesian model. Explain, using a diagram, that if AD increases in the vertical section of the AS curve, then there is an inflationary gap. Discuss why, in contrast to the monetarist/new classical model, increases in aggregate demand in the Keynesian AD/AS model need not be inflationary, unless the economy is operating close to, or at, the level of full employment. 	

Sub-topic	SL/HL core	HL
The Keynesian multiplier		
The nature of the Keynesian multiplier		<ul style="list-style-type: none"> Explain, with reference to the concepts of leakages (withdrawals) and injections, the nature and importance of the Keynesian multiplier. Calculate the multiplier using either of the following formulae. $\frac{1}{(1 - MPC)}$ $\frac{1}{(MPS + MPT + MPW)}$ Use the multiplier to calculate the effect on GDP of a change in an injection in investment, government spending or exports. Draw a Keynesian AD/AS diagram to show the impact of the multiplier.

Theory of knowledge: potential connections
Business confidence is a contributing factor to the level of AD. What knowledge issues arise in attempting to measure business confidence?

The Keynesian and Monetarist positions differ on the shape of the AS curve. What is needed to settle this question: empirical evidence (if so, what should be measured?); strength of theoretical argument, or factors external to economics such as political conviction?

2.3 Macroeconomic objectives

Sub-topic	SL/HL core	HL
Low unemployment		
The meaning of unemployment	<ul style="list-style-type: none"> Define the term unemployment. Explain how the unemployment rate is calculated. Explain the difficulties in measuring unemployment, including the existence of hidden unemployment, the existence of underemployment, and the fact that it is an average and therefore ignores regional, ethnic, age and gender disparities. 	<ul style="list-style-type: none"> Calculate the unemployment rate from a set of data.
Consequences of unemployment	<ul style="list-style-type: none"> Discuss possible economic consequences of unemployment, including a loss of GDP, loss of tax revenue, increased cost of unemployment benefits, loss of income for individuals and greater disparities in the distribution of income. Discuss possible personal and social consequences of unemployment, including increased crime rates, increased stress levels, increased indebtedness, homelessness and family breakdown. 	
Types and causes of unemployment	<ul style="list-style-type: none"> Describe, using examples, the meaning of frictional, structural, seasonal and cyclical (demand-deficient) unemployment. Distinguish between the causes of frictional, structural, seasonal and cyclical (demand-deficient) unemployment. 	

Sub-topic	SL/HL core	HL
	<ul style="list-style-type: none"> Explain, using a diagram, that cyclical unemployment is caused by a fall in aggregate demand. Explain, using a diagram, that structural unemployment is caused by changes in the demand for particular labour skills, changes in the geographical location of industries, and labour market rigidities. Evaluate government policies to deal with the different types of unemployment. 	
Low and stable rate of inflation		
The meaning of inflation, disinflation and deflation	<ul style="list-style-type: none"> Distinguish between inflation, disinflation and deflation. Explain that inflation and deflation are typically measured by calculating a consumer price index (CPI), which measures the change in prices of a basket of goods and services consumed by the average household. Explain that different income earners may experience a different rate of inflation when their pattern of consumption is not accurately reflected by the CPI. Explain that inflation figures may not accurately reflect changes in consumption patterns and the quality of the products purchased. Explain that economists measure a core/underlying rate of inflation to eliminate the effect of sudden swings in the prices of food and oil, for example. Explain that a producer price index measuring changes in the prices of factors of production may be useful in predicting future inflation. 	<ul style="list-style-type: none"> Construct a weighted price index, using a set of data provided. Calculate the inflation rate from a set of data.

Sub-topic	SL/HL core	HL
Consequences of inflation	<ul style="list-style-type: none"> Discuss the possible consequences of a high inflation rate, including greater uncertainty, redistributive effects, less saving, and the damage to export competitiveness. 	
Consequences of deflation	<ul style="list-style-type: none"> Discuss the possible consequences of deflation, including high levels of cyclical unemployment and bankruptcies. 	
Types and causes of inflation	<ul style="list-style-type: none"> Explain, using a diagram, that demand-pull inflation is caused by changes in the determinants of AD, resulting in an increase in AD. Explain, using a diagram, that cost-push inflation is caused by an increase in the costs of factors of production, resulting in a decrease in SRAS. Evaluate government policies to deal with the different types of inflation. 	
Possible relationships between unemployment and inflation		<ul style="list-style-type: none"> Discuss, using a short-run Phillips curve diagram, the view that there is a possible trade-off between the unemployment rate and the inflation rate in the short run. Explain, using a diagram, that the short-run Phillips curve may shift outwards, resulting in stagflation (caused by a decrease in SRAS due to factors including supply shocks).

Sub-topic	SL/HL core	HL
		<ul style="list-style-type: none"> Discuss, using a diagram, the view that there is a long-run Phillips curve that is vertical at the natural rate of unemployment and therefore there is no trade-off between the unemployment rate and the inflation rate in the long run. Explain that the natural rate of unemployment is the rate of unemployment that exists when the economy is producing at the full employment level of output.
Economic growth		
The meaning of economic growth	<ul style="list-style-type: none"> Define economic growth as an increase in real GDP. 	<ul style="list-style-type: none"> Calculate the rate of economic growth from a set of data.
Causes of economic growth	<ul style="list-style-type: none"> Describe, using a production possibilities curve (PPC) diagram, economic growth as an increase in actual output caused by factors including a reduction in unemployment and increases in productive efficiency, leading to a movement of a point inside the PPC to a point closer to the PPC. Describe, using a PPC diagram, economic growth as an increase in production possibilities caused by factors including increases in the quantity and quality of resources, leading to outward PPC shifts. Describe, using an LRAS diagram, economic growth as an increase in potential output caused by factors including increases in the quantity and quality of resources, leading to a rightward shift of the LRAS curve. 	

Sub-topic	SL/HL core	HL
Consequences of economic growth	<ul style="list-style-type: none"> Explain the importance of investment for economic growth, referring to investment in physical capital, human capital and natural capital. Explain the importance of improved productivity for economic growth. Discuss the possible consequences of economic growth, including the possible impacts on living standards, unemployment, inflation, the distribution of income, the current account of the balance of payments, and sustainability. 	
Equity in the distribution of income		
The meaning of equity in the distribution of income	<ul style="list-style-type: none"> Explain the difference between equity in the distribution of income and equality in the distribution of income. Explain that due to unequal ownership of factors of production, the market system may not result in an equitable distribution of income. 	
Indicators of income equality/inequality	<ul style="list-style-type: none"> Analyse data on relative income shares of given percentages of the population, including deciles and quintiles. Draw a Lorenz curve and explain its significance. Explain how the Gini coefficient is derived and interpreted. 	

Sub-topic	SL/HL core	HL
Poverty	<ul style="list-style-type: none"> Distinguish between absolute poverty and relative poverty. Explain possible causes of poverty, including low incomes, unemployment and lack of human capital. Explain possible consequences of poverty, including low living standards, and lack of access to health care and education. 	
The role of taxation in promoting equity	<ul style="list-style-type: none"> Distinguish between direct and indirect taxes, providing examples of each, and explain that direct taxes may be used as a mechanism to redistribute income. Distinguish between progressive, regressive and proportional taxation, providing examples of each. 	<ul style="list-style-type: none"> Calculate the marginal rate of tax and the average rate of tax from a set of data.
Other measures to promote equity	<ul style="list-style-type: none"> Explain that governments undertake expenditures to provide directly, or to subsidize, a variety of socially desirable goods and services (including health care services, education, and infrastructure that includes sanitation and clean water supplies), thereby making them available to those on low incomes. Explain the term transfer payments, and provide examples, including old age pensions, unemployment benefits and child allowances. 	
The relationship between equity and efficiency	<ul style="list-style-type: none"> Evaluate government policies to promote equity (taxation, government expenditure and transfer payments) in terms of their potential positive or negative effects on efficiency in the allocation of resources. 	

<p>Theory of knowledge: potential connections What criteria can be used to order macroeconomic objectives in terms of priority? Are such criteria external to economics (that is, normative)?</p> <p>Is economic growth always beneficial? What could be meant by the word “beneficial”?</p> <p>Is there always a cost to economic growth?</p> <p>The notion of fairness can be approached from a number of perspectives—equality of opportunity, maximizing the income of the least well-off group, and absolute equality of income. Which of these notions seems to be most attractive? Why? Examine what each of these perspectives suggests is a fair distribution of income.</p> <p>Equality of opportunity implies correcting for social advantage (for example, government might devote more resources to the education of a child brought up in less prosperous circumstances than one brought up in a comfortable home whose parents are university lecturers). How far should the state go in making such corrections? Should all parents be forced to read to their children so that no child should be at a disadvantage? Should the state attempt to correct for the uneven distribution of natural abilities such as IQ (intelligence quotient) by devoting proportionally more resources to children of less than average IQ.</p>

2.4 Fiscal policy

Sub-topic	SL/HL core	HL
The government budget		
Sources of government revenue	<ul style="list-style-type: none"> Explain that the government earns revenue primarily from taxes (direct and indirect), as well as from the sale of goods and services and the sale of state-owned (government-owned) enterprises. 	
Types of government expenditures	<ul style="list-style-type: none"> Explain that government spending can be classified into current expenditures, capital expenditures and transfer payments, providing examples of each. 	
The budget outcome	<ul style="list-style-type: none"> Distinguish between a budget deficit, a budget surplus and a balanced budget. Explain the relationship between budget deficits/surpluses and the public (government) debt. 	

Sub-topic	SL/HL core	HL
The role of fiscal policy		
Fiscal policy and short-term demand management	<ul style="list-style-type: none"> Explain how changes in the level of government expenditure and/or taxes can influence the level of aggregate demand in an economy. Describe the mechanism through which expansionary fiscal policy can help an economy close a deflationary (recessionary) gap. Construct a diagram to show the potential effects of expansionary fiscal policy, outlining the importance of the shape of the aggregate supply curve. Describe the mechanism through which contractionary fiscal policy can help an economy close an inflationary gap. Construct a diagram to show the potential effects of contractionary fiscal policy, outlining the importance of the shape of the aggregate supply curve. 	
The impact of automatic stabilizers	<ul style="list-style-type: none"> Explain how factors including the progressive tax system and unemployment benefits, which are influenced by the level of economic activity and national income, automatically help stabilize short-term fluctuations. 	

Sub-topic	SL/HL core	HL
Fiscal policy and its impact on potential output	<ul style="list-style-type: none"> Explain that fiscal policy can be used to promote long-term economic growth (increases in potential output) indirectly by creating an economic environment that is favourable to private investment, and directly through government spending on physical capital goods and human capital formation, as well as provision of incentives for firms to invest. 	
Evaluation of fiscal policy	<ul style="list-style-type: none"> Evaluate the effectiveness of fiscal policy through consideration of factors including the ability to target sectors of the economy, the direct impact on aggregate demand, the effectiveness of promoting economic activity in a recession, time lags, political constraints, crowding out, and the inability to deal with supply-side causes of instability. 	

Theory of knowledge: potential connections
 In one sense the imposition of taxes by government on individuals amounts to a restriction of individual freedom. How can we know when such government interference in individual freedom is justified?

2.5 Monetary policy

Sub-topic	SL/HL core	HL
Interest rates		
Interest rate determination and the role of a central bank	<ul style="list-style-type: none"> Describe the role of central banks as regulators of commercial banks and bankers to governments. Explain that central banks are usually made responsible for interest rates and exchange rates in order to achieve macroeconomic objectives. 	

Sub-topic	SL/HL core	HL
	<ul style="list-style-type: none"> Explain, using a demand and supply of money diagram, how equilibrium interest rates are determined, outlining the role of the central bank in influencing the supply of money. 	
The role of monetary policy		
Monetary policy and short-term demand management	<ul style="list-style-type: none"> Explain how changes in interest rates can influence the level of aggregate demand in an economy. Describe the mechanism through which easy (expansionary) monetary policy can help an economy close a deflationary (recessionary) gap. Construct a diagram to show the potential effects of easy (expansionary) monetary policy, outlining the importance of the shape of the aggregate supply curve. Describe the mechanism through which tight (contractionary) monetary policy can help an economy close an inflationary gap. Construct a diagram to show the potential effects of tight (contractionary) monetary policy, outlining the importance of the shape of the aggregate supply curve. 	
Monetary policy and inflation targeting	<ul style="list-style-type: none"> Explain that central banks of certain countries, rather than focusing on the maintenance of both full employment and a low rate of inflation, are guided in their monetary policy by the objective to achieve an explicit or implicit inflation rate target. 	

Sub-topic	SL/HL core	HL
Evaluation of monetary policy	<ul style="list-style-type: none"> Evaluate the effectiveness of monetary policy through consideration of factors including the independence of the central bank, the ability to adjust interest rates incrementally, the ability to implement changes in interest rates relatively quickly, time lags, limited effectiveness in increasing aggregate demand if the economy is in deep recession and conflict among government economic objectives. 	

2.6 Supply-side policies

Sub-topic	SL/HL core	HL
The role of supply-side policies		
Supply-side policies and the economy	<ul style="list-style-type: none"> Explain that supply-side policies aim at positively affecting the production side of an economy by improving the institutional framework and the capacity to produce (that is, by changing the quantity and/or quality of factors of production). State that supply-side policies may be market-based or interventionist, and that in either case they aim to shift the LRAS curve to the right, achieving growth in potential output. 	
Interventionist supply-side policies		
Investment in human capital	<ul style="list-style-type: none"> Explain how investment in education and training will raise the levels of human capital and have a short-term impact on aggregate demand, but more importantly will increase LRAS. 	

Sub-topic	SL/HL core	HL
Investment in new technology	<ul style="list-style-type: none"> Explain how policies that encourage research and development will have a short-term impact on aggregate demand, but more importantly will result in new technologies and will increase LRAS. 	
Investment in infrastructure	<ul style="list-style-type: none"> Explain how increased and improved infrastructure will have a short-term impact on aggregate demand, but more importantly will increase LRAS. 	
Industrial policies	<ul style="list-style-type: none"> Explain that targeting specific industries through policies including tax cuts, tax allowances and subsidized lending promotes growth in key areas of the economy and will have a short-term impact on aggregate demand but, more importantly, will increase LRAS. 	
Market-based supply-side policies		
Policies to encourage competition	<ul style="list-style-type: none"> Explain how factors including deregulation, privatization, trade liberalization and anti-monopoly regulation are used to encourage competition. 	
Labour market reforms	<ul style="list-style-type: none"> Explain how factors including reducing the power of labour unions, reducing unemployment benefits and abolishing minimum wages are used to make the labour market more flexible (more responsive to supply and demand). 	
Incentive-related policies	<ul style="list-style-type: none"> Explain how factors including personal income tax cuts are used to increase the incentive to work, and how cuts in business tax and capital gains tax are used to increase the incentive to invest. 	

Sub-topic	SL/HL core	HL
Evaluation of supply-side policies		
The strengths and weaknesses of supply-side policies	<ul style="list-style-type: none"> Evaluate the effectiveness of supply-side policies through consideration of factors including time lags, the ability to create employment, the ability to reduce inflationary pressure, the impact on economic growth, the impact on the government budget, the effect on equity, and the effect on the environment. 	

Theory of knowledge: potential connections
 How can we know whether government should support pure research, which might contribute to the sum total of human knowledge but which might never have an impact on technology? What other knowledge issues are relevant to investment in pure research?
 Investment in education and training is a common supply-side policy. What other reasons could there be for supporting the education of the population? What knowledge issues arise in answering the question as to whether government should shoulder this responsibility or whether it should be left to the market?

Section 3: International economics

3.1 International trade

Sub-topic	SL/HL core	HL
Free trade		
The benefits of trade	<ul style="list-style-type: none"> Explain that gains from trade include lower prices for consumers, greater choice for consumers, the ability of producers to benefit from economies of scale, the ability to acquire needed resources, a more efficient allocation of resources, increased competition, and a source of foreign exchange. 	

Sub-topic	SL/HL core	HL
Absolute and comparative advantage		<ul style="list-style-type: none"> Explain the theory of absolute advantage. Explain, using a diagram, the gains from trade arising from a country's absolute advantage in the production of a good. Explain the theory of comparative advantage. Describe the sources of comparative advantage, including the differences between countries in factor endowments and the levels of technology. Draw a diagram to show comparative advantage. Calculate opportunity costs from a set of data in order to identify comparative advantage. Draw a diagram to illustrate comparative advantage from a set of data. Discuss the real-world relevance and limitations of the theory of comparative advantage, considering factors including the assumptions on which it rests, and the costs and benefits of specialization (a full discussion must take into account arguments in favour and against free trade and protection—see below).
The World Trade Organization (WTO)	<ul style="list-style-type: none"> Describe the objectives and functions of the WTO. 	
Restrictions on free trade: Trade protection		
Types of trade protection	<ul style="list-style-type: none"> Explain, using a tariff diagram, the effects of imposing a tariff on imported goods on different stakeholders, including foreign producers, consumers and the government. 	<ul style="list-style-type: none"> Calculate from diagrams the effects of imposing a tariff on imported goods on different stakeholders, including domestic producers, foreign producers, consumers and the government.

Sub-topic	SL/HL core	HL
	<ul style="list-style-type: none"> Explain, using a diagram, the effects of setting a quota on foreign producers on different stakeholders, including domestic producers, foreign producers, consumers and the government. Explain, using a diagram, the effects of giving a subsidy to domestic producers on different stakeholders, including domestic producers, foreign producers, consumers and the government. Describe administrative barriers that may be used as a means of protection. Evaluate the effect of different types of trade protection. 	<ul style="list-style-type: none"> Calculate from diagrams the effects of setting a quota on foreign producers on different stakeholders, including domestic producers, foreign producers, consumers and the government. Calculate from diagrams the effects of giving a subsidy to domestic producers on different stakeholders, including domestic producers, foreign producers, consumers and the government.
Arguments for and against trade protection (arguments against and for free trade)	<ul style="list-style-type: none"> Discuss the arguments in favour of trade protection, including the protection of domestic jobs, national security, protection of infant industries, the maintenance of health, safety and environmental standards, anti-dumping and unfair competition, a means of overcoming a balance of payments deficit and a source of government revenue. Discuss the arguments against trade protection, including a misallocation of resources, the danger of retaliation and "trade wars", the potential for corruption, increased costs of production due to lack of competition, higher prices for domestic consumers, increased costs of imported factors of production and reduced export competitiveness. 	

Theory of knowledge: potential connections
Are there moral as well as economic arguments in favour of free trade?

3.2 Exchange rates

Sub-topic	SL/HL core	HL
Freely floating exchange rates		
Determination of freely floating exchange rates	<ul style="list-style-type: none"> Explain that the value of an exchange rate in a floating system is determined by the demand for, and supply of, a currency. Draw a diagram to show determination of exchange rates in a floating exchange rate system. 	<ul style="list-style-type: none"> Calculate the value of one currency in terms of another currency. Calculate the exchange rate for linear demand and supply functions. Plot demand and supply curves for a currency from linear functions and identify the equilibrium exchange rate. Using exchange rates, calculate the price of a good in different currencies.
Causes of changes in the exchange rate	<ul style="list-style-type: none"> Describe the factors that lead to changes in currency demand and supply, including foreign demand for a country's exports, domestic demand for imports, relative interest rates, relative inflation rates, investment from overseas in a country's firms (foreign direct investment and portfolio investment) and speculation. Distinguish between a depreciation of the currency and an appreciation of the currency. Draw diagrams to show changes in the demand for, and supply of, a currency. 	<ul style="list-style-type: none"> Calculate the changes in the value of a currency from a set of data.
The effects of exchange rate changes	<ul style="list-style-type: none"> Evaluate the possible economic consequences of a change in the value of a currency, including the effects on a country's inflation rate, employment, economic growth and current account balance. 	

Sub-topic	SL/HL core	HL
Government intervention		
Fixed exchange rates	<ul style="list-style-type: none"> Describe a fixed exchange rate system involving commitment to a single fixed rate. Distinguish between a devaluation of a currency and a revaluation of a currency. Explain, using a diagram, how a fixed exchange rate is maintained. 	
Managed exchange rates (managed float)	<ul style="list-style-type: none"> Explain how a managed exchange rate operates, with reference to the fact that there is a periodic government intervention to influence the value of an exchange rate. Examine the possible consequences of overvalued and undervalued currencies. 	
Evaluation of different exchange rate systems	<ul style="list-style-type: none"> Compare and contrast a fixed exchange rate system with a floating exchange rate system, with reference to factors including the degree of certainty for stakeholders, ease of adjustment, the role of international reserves in the form of foreign currencies and flexibility offered to policy makers. 	

3.3 The balance of payments

Sub-topic	SL/HL core	HL
The structure of the balance of payments		
The meaning of the balance of payments	<ul style="list-style-type: none"> Outline the role of the balance of payments. Distinguish between debit items and credit items in the balance of payments. 	

Sub-topic	SL/HL core	HL
The components of the balance of payments accounts	<ul style="list-style-type: none"> Explain the four components of the current account, specifically the balance of trade in goods, the balance of trade in services, income and current transfers. Distinguish between a current account deficit and a current account surplus. Explain the two components of the capital account, specifically capital transfers and transaction in non-produced, non-financial assets. Explain the three main components of the financial account, specifically, direct investment, portfolio investment and reserve assets. 	<ul style="list-style-type: none"> Calculate elements of the balance of payments from a set of data.
The relationships between the accounts	<ul style="list-style-type: none"> Explain that the current account balance is equal to the sum of the capital account and financial account balances (see the appendix, "The balance of payments"). Examine how the current account and the financial account are interdependent. 	
Current account deficits		
The relationship between the current account and the exchange rate	<ul style="list-style-type: none"> Explain why a deficit in the current account of the balance of payments may result in downward pressure on the exchange rate of the currency. 	
Implications of a persistent current account deficit		<ul style="list-style-type: none"> Discuss the implications of a persistent current account deficit, referring to factors including foreign ownership of domestic assets, exchange rates, interest rates, indebtedness, international credit ratings and demand management.

Sub-topic	SL/HL core	HL
Methods to correct a persistent current account deficit		<ul style="list-style-type: none"> Explain the methods that a government can use to correct a persistent current account deficit, including expenditure switching policies, expenditure reducing policies and supply-side policies, to increase competitiveness. Evaluate the effectiveness of the policies to correct a persistent current account deficit.
The Marshall-Lerner condition and the J-curve effect		<ul style="list-style-type: none"> State the Marshall-Lerner condition and apply it to explain the effects of depreciation/devaluation. Explain the J-curve effect, with reference to the Marshall-Lerner condition.
Current account surpluses		
The relationship between the current account and the exchange rate	<ul style="list-style-type: none"> Explain why a surplus in the current account of the balance of payments may result in upward pressure on the exchange rate of the currency. 	
Implications of a persistent current account surplus		<ul style="list-style-type: none"> Discuss the possible consequences of a rising current account surplus, including lower domestic consumption and investment, as well as the appreciation of the domestic currency and reduced export competitiveness.

3.4 Economic integration

Sub-topic	SL/HL core	HL
Forms of economic integration		
Preferential trade agreements	<ul style="list-style-type: none"> Distinguish between bilateral and multilateral (WTO) trade agreements. Explain that preferential trade agreements give preferential access to certain products from certain countries by reducing or eliminating tariffs, or by other agreements relating to trade. 	
Trading blocs	<ul style="list-style-type: none"> Distinguish between a free trade area, a customs union and a common market. Explain that economic integration will increase competition among producers within the trading bloc. Compare and contrast the different types of trading blocs. 	<ul style="list-style-type: none"> Explain the concepts of trade creation and trade diversion in a customs union. Explain that different forms of economic integration allow member countries to gain from economies of scale.
Monetary union	<ul style="list-style-type: none"> Explain that a monetary union is a common market with a common currency and a common central bank. Discuss the possible advantages and disadvantages of a monetary union for its members. 	

Theory of knowledge: potential connections
 What criteria can be used to assess the benefits and the costs of increased economic integration?
 Might increased economic integration ever be considered undesirable?

3.5 Terms of trade (HL only)

Sub-topic	SL/HL core	HL
The meaning of the terms of trade		
Measurement		<ul style="list-style-type: none"> Explain the meaning of the terms of trade. Explain how the terms of trade are measured. Distinguish between an improvement and a deterioration in the terms of trade. Calculate the terms of trade using the equation: $\text{Index of average export prices} / \text{Index of average import prices} \times 100$.
Causes of changes in the terms of trade		<ul style="list-style-type: none"> Explain that the terms of trade may change in the short term due to changes in demand conditions for exports and imports, changes in global supply of key inputs (such as oil), changes in relative inflation rates and changes in relative exchange rates. Explain that the terms of trade may change in the long term due to changes in world income levels, changes in productivity within the country and technological developments.
Consequences of changes in the terms of trade		<ul style="list-style-type: none"> Explain how changes in the terms of trade in the long term may result in a global redistribution of income. Examine the effects of changes in the terms of trade on a country's current account, using the concepts of price elasticity of demand for exports and imports.

Sub-topic	SL/HL core	HL
		<ul style="list-style-type: none"> Explain the impacts of short-term fluctuations and long-term deterioration in the terms of trade of economically less developed countries that specialize in primary commodities, using the concepts of price elasticity of demand and supply for primary products and income elasticity of demand.

Section 4: Development economics

4.1 Economic development

Sub-topic	SL/HL core	HL
The nature of economic growth and economic development		
Economic growth and economic development	<ul style="list-style-type: none"> Distinguish between economic growth and economic development. Explain the multidimensional nature of economic development in terms of reducing widespread poverty, raising living standards, reducing income inequalities and increasing employment opportunities. Explain that the most important sources of economic growth in economically less developed countries include increases in quantities of physical capital and human capital, the development and use of new technologies that are appropriate to the conditions of the economically less developed countries, and institutional changes. 	

Sub-topic	SL/HL core	HL
	<ul style="list-style-type: none"> Explain the relationship between economic growth and economic development, noting that some limited economic development is possible in the absence of economic growth, but that over the long term economic growth is usually necessary for economic development (however, it should be understood that under certain circumstances economic growth may not lead to economic development). 	
Common characteristics of economically less developed countries	<ul style="list-style-type: none"> Explain, using examples, that economically less developed countries share certain common characteristics (noting that it is dangerous to generalize as there are many exceptions in each case), including low levels of GDP per capita, high levels of poverty, relatively large agricultural sectors, large urban informal sectors and high birth rates. Explain that in some countries there may be communities caught in a poverty trap (poverty cycle) where poor communities are unable to invest in physical, human and natural capital due to low or no savings; poverty is therefore transmitted from generation to generation, and there is a need for intervention to break out of the cycle. 	

Sub-topic	SL/HL core	HL
Diversity among economically less developed nations	<ul style="list-style-type: none"> Explain, using examples, that economically less developed countries differ enormously from each other in terms of a variety of factors, including resource endowments, climate, history (colonial or otherwise), political systems and degree of political stability. 	
International development goals	<ul style="list-style-type: none"> Outline the current status of international development goals, including the Millennium Development Goals. 	

Theory of knowledge: potential connections

What are the knowledge issues involved in compiling a list of development goals?

Does the term “economic development” mean different things in different cultures?

Are there two ways of thinking about economics: from the point of view of an economically more developed country or from that of an economically less developed country? If so, what is the difference? Are there two different sets of values in which such a distinction is grounded?

How can we decide if the distinction between economically more developed countries and economically less developed countries is a meaningful one given that economic development itself might not be so clearly defined?

4.2 Measuring development

Sub-topic	SL/HL core	HL
Measurement methods		
Single indicators	<ul style="list-style-type: none"> Distinguish between GDP per capita figures and GNI per capita figures. Compare and contrast the GDP per capita figures and the GNI per capita figures for economically more developed countries and economically less developed countries. Distinguish between GDP per capita figures and GDP per capita figures at purchasing power parity (PPP) exchange rates. 	

Sub-topic	SL/HL core	HL
	<ul style="list-style-type: none"> Compare and contrast GDP per capita figures and GDP per capita figures at purchasing power parity (PPP) exchange rates for economically more developed countries and economically less developed countries. Compare and contrast two health indicators for economically more developed countries and economically less developed countries. Compare and contrast two education indicators for economically more developed countries and economically less developed countries. 	
Composite indicators	<ul style="list-style-type: none"> Explain that composite indicators include more than one measure and so are considered to be better indicators of economic development. Explain the measures that make up the Human Development Index (HDI). Compare and contrast the HDI figures for economically more developed countries and economically less developed countries. Explain why a country's GDP/GNI per capita global ranking may be lower, or higher, than its HDI global ranking. 	

Theory of knowledge: potential connections

What criteria could we use to determine whether a particular method for measuring development is effective?

What knowledge issues might be encountered in constructing a composite indicator to measure development?

4.3 The role of domestic factors

Sub-topic	SL/HL core	HL
Domestic factors and economic development		
Domestic factors	<ul style="list-style-type: none"> With reference to a specific developing economy, and using appropriate diagrams where relevant, examine how the following factors contribute to economic development. <ol style="list-style-type: none"> Education and health The use of appropriate technology Access to credit and micro-credit The empowerment of women Income distribution 	

4.4 The role of international trade

Sub-topic	SL/HL core	HL
International trade and economic development		
Trade problems facing many economically less developed countries	<ul style="list-style-type: none"> With reference to specific examples, explain how the following factors are barriers to development for economically less developed countries. <ol style="list-style-type: none"> Over-specialization on a narrow range of products Price volatility of primary products Inability to access international markets 	<ul style="list-style-type: none"> With reference to specific examples, explain how the following factor is a barrier to development for economically less developed countries. <ol style="list-style-type: none"> Long-term changes in the terms of trade

Sub-topic	SL/HL core	HL
Trade strategies for economic growth and economic development	<ul style="list-style-type: none"> With reference to specific examples, evaluate each of the following as a means of achieving economic growth and economic development. <ol style="list-style-type: none"> Import substitution Export promotion Trade liberalization The role of the WTO Bilateral and regional preferential trade agreements Diversification 	

4.5 The role of foreign direct investment (FDI)

Sub-topic	SL/HL core	HL
Foreign direct investment and multinational corporations (MNCs)		
The meaning of FDI and MNCs	<ul style="list-style-type: none"> Describe the nature of foreign direct investment (FDI) and multinational corporations (MNCs). Explain the reasons why MNCs expand into economically less developed countries. Describe the characteristics of economically less developed countries that attract FDI, including low cost factor inputs, a regulatory framework that favours profit repatriation and favourable tax rules. 	
Advantages and disadvantages of FDI for economically less developed countries	<ul style="list-style-type: none"> Evaluate the impact of foreign direct investment (FDI) for economically less developed countries. 	

4.6 The roles of foreign aid and multilateral development assistance

Sub-topic	SL/HL core	HL
Foreign aid		
Classifications and types of aid	<ul style="list-style-type: none"> Explain that aid is extended to economically less developed countries either by governments of donor countries, in which case it is called official development assistance (ODA), or by non-governmental organizations (NGOs). Explain that humanitarian aid consists of food aid, medical aid and emergency relief aid. Explain that development aid consists of grants, concessional long-term loans, project aid that includes support for schools and hospitals, and programme aid that includes support for sectors such as the education sector and the financial sector. Explain that, for the most part, the priority of NGOs is to provide aid on a small scale to achieve development objectives. Explain that aid might also come in the form of tied aid. Explain the motivations of economically more developed countries giving aid. Compare and contrast the extent, nature and sources of ODA to two economically less developed countries. 	
Evaluation of foreign aid	<ul style="list-style-type: none"> Evaluate the effectiveness of foreign aid in contributing to economic development. Compare and contrast the roles of aid and trade in economic development. 	

Sub-topic	SL/HL core	HL
Multilateral development assistance		
The roles of the International Monetary Fund (IMF) and the World Bank	<ul style="list-style-type: none"> Examine the current roles of the IMF and the World Bank in promoting economic development. 	

4.7 The role of international debt

Sub-topic	SL/HL core	HL
Foreign debt		
Foreign debt and its consequences	<ul style="list-style-type: none"> Outline the meaning of foreign debt and explain why countries borrow from foreign creditors. Explain that in some cases countries have become heavily indebted, requiring rescheduling of the debt payments and/or conditional assistance from international organizations, including the IMF and the World Bank. Explain why the servicing of international debt causes balance of payments problems and has an opportunity cost in terms of foregone spending on development objectives. Explain that the burden of debt has led to pressure to cancel the debt of heavily indebted countries. 	

Theory of knowledge: potential connections
For each factor, what would you consider to be sufficient evidence that it plays a role in enhancing or inhibiting development?

4.8 The balance between markets and intervention

Sub-topic	SL/HL core	HL
Strengths and weaknesses of market-oriented policies		
Strengths	<ul style="list-style-type: none"> Discuss the positive outcomes of market-oriented policies (such as liberalized trade and capital flows, privatization and deregulation), including a more efficient allocation of resources and economic growth. 	
Weaknesses	<ul style="list-style-type: none"> Discuss the negative outcomes of market-oriented strategies, including market failure, the development of a dual economy and income inequalities. 	
Strengths and weaknesses of interventionist policies		
Strengths	<ul style="list-style-type: none"> Discuss the strengths of interventionist policies, including the provision of infrastructure, investment in human capital, the provision of a stable macroeconomic economy and the provision of a social safety net. 	
Weaknesses	<ul style="list-style-type: none"> Discuss the limitations of interventionist policies, including excessive bureaucracy, poor planning and corruption. 	
Market with government intervention	<ul style="list-style-type: none"> Explain the importance of good governance in the development process. Discuss the view that economic development may best be achieved through a complementary approach, involving a balance of market oriented policies and government intervention. 	

Theory of knowledge: potential connections
What criteria can economists use to decide on the balance between markets and intervention?
Is development economics dependent upon external normative notions such as what constitutes a good or fulfilled life?