Year 12 AP2 Topic Lists

27th June – 1st July 2022



Cardinal Pole Catholic School

Art

Design Idea 1 along your personal theme

Success Criteria:

- > Develops an idea along the theme
- > Links to chosen artists
- > At least part of the idea is drawn from your own primary sources
- > Relevant style choice
- > Relevant media choice
- > Fulfils your aims and intentions how do you want the viewer to respond?

Please remember that your sketchbook is marked as well as your design idea - all 'Personal Learning Plan' tasks need to be completed too

Biology

Paper 1: Breadth in Biology (1h30)

Paper 2: Depth in Biology (1h30)

For both papers you will be tested on modules 1, 2, 3 and 4.

Module 1: Development of practical skills in Biology

Module 2: Foundations in Biology

Module 3: Exchange and Transport

Module 4: Biodiversity, Evolution and Disease

Business

- 1.1.1 The market
- 1.1.3 Market positioning
- 1.2.1 Demand
- 1.2.2 Supply
- 1.2.3 Markets
- 1.2.4 Price elasticity of demand
- 1.2.5 Income elasticity of demand
- 1.4.3 Organisational design
- 1.4.4 Motivation in theory and practice
- 1.5.3 Business objectives
- 1.5.4 Forms of Business
- 2.1.1 Internal finance 2.1.2 External finance
- 2.1.4 Planning Business plan
- 2.2.2 Sales, revenue and costs
- 2.2.3 Break -even
- 2.3.1 Profit
- 2.3.2 Liquidity
- 2.2.4 Budgets
- 2.4.4 Quality management

Chemistry

Paper 1: Breadth in Chemistry (1h30)

Paper 2: Depth in Chemistry (1h30)

For both papers you will be tested on modules 2, 3 and 4.

Module 2: Foundations in Chemistry

Module 3: Periodic table and energy

Module 4: Core organic chemistry and analysis

Drama

Your AP2 grade will be based on your completion of Component 1 Devising.

This is 40% of your overall A Level grade.

- 10% of this is the performance mark your will be awarded out of 20.
- 30% of this is the 3000 word portfolio. This will be marked out of 60 and graded with your performance to give your overall grade for this component.

This means that your grade will not be a reflection of Component 2 and Component 3 as these will be visited in year 13. However it is somewhat reflective of your overall practice as both performance and written aspects of the course will be taken into consideration.

Economics

- 1.2.4 Specialisation
- 1.3.1 Demand
- 1.32. Supply
- 2.1.3 Research and Development and innovation
- 2.1.4 How the digital economy affects markets and firms
- 2.2.4 Price Elasticity of Income
- 2.2.4 Developed, emerging and developing economies
- 2.4.3 International trade
- 2.4.4 Exchange rates
- 2.5.3 Inflation

English

Paper 1 – 3 hours

Topic List:

- Othello misogyny, control, gender roles
- Unseen Poetry loss, break down of relationships, expressions of sadness and despair
- WH/poetry fear, loss, strength of love, reciprocated vs unreciprocated love

Further Maths

Core Pure
Linear transformations
Matrices and determinant of 2x2
Series
Roots of polynomials
Transformations of roots
3x3 matrices
Loci
Systems of linear equations
Modelling with vectors
Vector equation of a plane
Minimum distance from point to a plane, line to a plane and point to a line
Angles between planes and lines
Proof by induction
Volumes of revolution - modelling
Decision
Critical path analysis
Scheduling diagrams
Planarity algorithm
Minimum spanning tree
Prim's algorithm
Nearest neighbour algorithm
Dijkstra's Algorithm
Floyd's algorithm
Route inspection
Sorting algorithms
Bin packing algorithms
Order of an algorithm
Precedence tables
Activity networks
Linear programming
Two stage simplex

Geography

Unit 1 - Physical Systems

Coastal Landscapes

- Climate change and landscapes
- Coastal management
- High/low energy coastlines
- Coastal management strategies

Hazardous Earth

- Earthquake/Volcanoes case study
- Structure of the Earth
- Different features of an earthquakes
- Earthquake management

Unit 2- Human Interactions

Disease Dilemmas

- Communicable/Non-Communicable Diseases
- Disease Fradication
- TNCS and medicine

Changing Spaces, Making Places

- Hackney/Lympstone Case Study's
- How can areas be rebranded and the different strategies involved in this process

History

Paper 1: America

Essays section:

3 Society and culture in change, 1917-80

- The changing position of women, 1917–80
 - o impact of the Roaring Twenties, Great Depression and New Deal on women
 - o impact of the Second World War and suburban life, 1941–60
 - o emergence of the women's liberation movement and its achievements
 - o extent of women's advancement, 1961–80.
- The impact of immigration, 1917–80:
 - o the nature of, and response to, immigration in the 1920s
 - o the impact on urban life, 1919–41
 - the impact of the Second World War, government policy and its consequences, 1941–80.
- The influence of popular culture and news media
 - o the social impact of cinema, popular music and radio, 1917–50
 - o the social impact of television from the 1950s
 - o the influence of broadcast news, 1920-80

4 The changing quality of life, 1917-80

- Economic influences: impact of boom, bust and recovery, 1917–41
 - o the impact of the Second World War, post-war affluence and growth, 1941–69
 - o the challenges of the 1970s
- Changing living standards: fluctuations in the standard of living, 1917–41
 - the impact of the Second World War and the growth of a consumer society, 1941–
 fliving standards, 1961–80, including the impact of anti-poverty policies and economic divisions.
- Leisure and travel: the reasons for, and the impact of, increased leisure time, 1917–80
 - o the growth of spectator sports
 - o the development, and influence, of a car-owning culture and improved air travel

Interpretations section:

5. What impact did the Reagan presidency (1981-89) have on the USA in the years 1981-96?

- The effect of Reagan's economic policies
- The extent to which 'big government' was reduced
- The nature and extent of social change
- The extent to which the presidency and US politics were revitalised.

Paper 2: South Africa

Topic	What does this include?	
Steve Biko	- Key ideas of Steve Biko and BC	
	- Influence on the Soweto Uprising	
	- Death of Steve Biko and significance	
Soweto Uprising	- Causes of the uprising	
	- Key events	
	- Significance of the Soweto Uprising	
ANC Abroad	- The role of the MK	
	- Hani Memorandum	
	- Role of Oliver Tambo	
Total Strategy	- What was the total strategy?	
	- Increased police powers	
	- Limited political and economic reform	
Problems facing	- Economic problems (surplus people etc)	
the NP	- Economic reforms (e.g. legalisation of strikes)	
	- Political problems (Muldergate, Verkampt vs Verlichte)	
	- Botha's reforms	
	- International pressure and economic sanctions (reasons for and	
	against)	

Key Questions:

What was the biggest problem facing the NP 1968-1983?

What was the significance of Soweto?

How important were individual figures in the fight against apartheid? (E.g. Tambo and Biko?)

How strong was opposition at this time? (Internal and international) How successful were the ANC in exile?

Topic	What does this include?	
UDF	- Who were the UDF?	
	- What did their aims involve?	
Violent protests	- Causes and events of Alexandra revolt	
and townships	 How were townships run following the revolt 	
International	 Introduction of economic sanctions and how this impacted South 	
Pressure	Africa	
Botha's Reforms	 Which acts did Botha repeal and why 	
De Klerk	- Who was De Klerk?	
	- Role in helping to end apartheid	
	- Role in increasing tensions	
CODESA	- What was CODESA? (Inc. Aims)	
	- Challenges faced by CODESA	
	- How successful was CODESA?	
1994 Elections	- Lead up to elections of 1994 (tensions)	
	- Who won the elections of 1994?	

Key Questions

Why did the townships start to revolt?

Why did the NP decide to negotiate?

What was the primary cause for the end of apartheid?

Was peace inevitable in 1994?

Maths

Pure
Quadratics
Differentiation from first principles
Solving cubics
Binomial expansion
Trigonometry
Algebraic inequalities
Solving equations with indices
Indefinite integrals
Modelling with vectors
Definite integrals
Proof and proof by counter example
Modelling with exponentials
Modelling with logarithms
Trigonometric Identities
Completing the square
Solving trigonometric equations
Integration to find areas
Circles
Tangents and equations of linear graphs
Cubics
Differentiation
Division of polynomials
Transformation of graphs
Mechanics
Equations of constant acceleration
Velocity time graphs
Connected particles
Pullies
Variable acceleration
Statistics
Venn Diagrams
Histograms
Probability
Linear interpolation
Outliers
Sampling
IQR

Finding probabilities with Binomial Distribution
Large Data set
Hypothesis Testing Binomial
Probability trees

Media

Paper 1

Component 1 – Media Products, Industries and Audiences (2hr 15 Minutes)

Advertising and Marketing (Sections A and B)

- Tide
 - o Media Language
 - Representation
 - Audience
 - o Contexts (Historical, Cultural, Social)
- Water Aid
 - o Media Language
 - Representation
 - o Audience
 - o Contexts (Cultural, Social)
- Kiss of The Vampire
 - o Media Language
 - o Representation
 - o Contexts (Historical Cultural, Social)

Newspapers (Sections A and B)

• The Mirror – March 13th 2019

- o Media Language
- Representation
- o Industries
- Audience
- Contexts (Political, cultural)

• The Times - March 13th 2019

- o Media Language
- Representation
- Industries
- o Audience
- Contexts (Political, cultural)

Music Video (Section A only)

• Beyoncé - Formation

- o Media Language
- Representation
- o Contexts (Historical, Cultural, Social)

• Vance Joy - Riptide

- o Media Language
- Representation
- o Contexts (Cultural, Social)

Radio (Section B Only)

- Late Night Women's Hour
 - Industries
 - Audience
 - Contexts (Historical, Social, Cultural)

Remember that the exam paper will include unseen texts in these forms - advertising and marketing, music video, newspapers) that you will need to analyse in terms of Media Language or Representation.

Paper 2

Component 2 – Media Forms and Products in Depth (1 Hour)

Television

- Humans
 - Media Language
 - o Representation
 - Industries
 - o Audience
 - Contexts
- The Returned
 - Media Language
 - Representation
 - Industries
 - Audience
 - Contexts

Theoretical Perspectives

You may need to refer to the following theories in your answers (for both components)

Media Language – Barthes (Semiotics), **Todorov** (Narratology), **Neale** (Genre), **Levi-Strauss** (Structuralism/Binary Opposites), **Baudrillard** (Postmodernism)

Representation – **bell hooks** (Feminism), **Van Zoonen** (Feminism), **Butler** (Gender performativity), **Hall** (Stereotypes), **Gauntlett** (Identity), **Gilroy** (Post-colonialism)

Industries - Curran and Seaton (Power and Media Industries), Livingstone and Lunt (Regulation), Hesmondhalgh (Cultural Industries)

Audience – Gerbner (Cultivation), Jenkins (Fandom), Shirky (End of audience), Hall (Reception)

Philosophy

Philosophy and Ethics

- Religious Experience
- Normative Ethics
- Application of Normative Ethics
- The Problem of Evil

Christianity

- Key Moral Principles
- Life After Death
- Religious Identity
- Religious Authority

Physics

Breadth in physics - Paper1

Source of emf

Air resistance

Relationship between work done and speed

Power dissipated by electric circuit

Hooke's law

S.I. base units

de Broglie wavelength

Resistance and resistivity of wire

Stress and strain calculations

Newton's laws of motion

Suvat equations including the graphs

Drift velocity including number density

Fundamental frequency of stationary waves

Projectile motion

Energy of photon

Diffraction of electrons

Rate of change of momentum

Thermistor in a circuit

Frequency and wavelength of electromagnetic radiation

Double slit experiment

Absolute uncertainty

Threshold voltage of LED

Phase difference between the points

Number of photons emitted by source of radiation

Polarization and Diffraction of waves

Refractive index and angle of refraction including total internal reflection

Photoelectric effect

Moments

Density of metal

Archimedes principle

Depth in physics – Paper 2

Potential divider with LDR

Voltage – $1/\lambda$ graph and determining Planck constant

Hook's law including stress and strain

Elastic potential energy

Momentum during elastic and inelastic collisions

Photoelectric effect including work function of metal and KE (max)

Coherent and non-coherent sound waves

Force – time graphs and finding velocity

Force – Extension graphs including Energy and area under the graph

Kirchhoff I. and II. Law and their application to internal resistance

Finding internal resistance from I-V graph

Density

Path and phase difference

Use of oscilloscope and determining frequency

Energy dissipated by resistor

Charge passing through the resistor calculations

Line of the best/worst fit including percentage uncertainty from the graph

Psychology

Psychology AP2 Topic List (Paper 1)

Social Influence

- 1. Conformity
 - Types and explanations
 - Conformity to social roles
- 2. Obedience
 - Situational variables
 - Situational explanations
 - Dispositional explanations
- 3. Resistance to social influence
- 4. Minority influence
- 5. Social influence and social change

Attachment

- 1. Caregiver-infant interactions
- 2. Schaffer's stages of attachment
- 3. The role of the father
- 4. Animal studies of attachment
- 5. Explanations of attachment
 - Learning theory
 - Bowlby's theory
- 6. Types of attachment
- 7. Cultural variations in attachment
- 8. Bowlby's theory of maternal deprivation
- 9. Romanian orphan studies:
 - Institutionalisation
- 10. Influence of early attachment on later relationships

Psychopathology

- 1. Definitions of abnormality
- 2. Definitions of abnormality
- **3.** Phobias
- **4.** The behavioural approach to explaining phobias
- 5. The behavioural approach to treating phobias
- 6. Characteristics of depression
- 7. Cognitive approach to explaining depression (Beck's theory- negative triad)

Psychology AP2 Topic List (Paper 2)

Memory:

- The multi-store model of memory: sensory register, short-term memory and long-term memory. Features of each store: coding, capacity and duration.
- Types of long-term memory: episodic, semantic, procedural.
- The working memory model: central executive, phonological loop, visuo-spatial sketchpad and episodic buffer. Features of the model: coding and capacity.
- Explanations for forgetting: proactive and retroactive interference and retrieval failure due to absence of cues.
- Factors affecting the accuracy of eyewitness testimony: misleading information, including leading questions and post-event discussion; anxiety.
- Improving the accuracy of eyewitness testimony, including the use of the cognitive interview.

Approaches:

Origins of Psychology: Wundt, introspection and the emergence of Psychology as a science.

The basic assumptions of the following approaches:

- Learning approaches:
 - i) the behaviourist approach, including classical conditioning and Pavlov's research, operant conditioning, types of reinforcement and Skinner's research;
 - ii) social learning theory including imitation, identification, modelling, vicarious reinforcement, the role of mediational processes and Bandura's research.
- The cognitive approach: the study of internal mental processes, the role of schema, the use of theoretical and computer models to explain and make inferences about mental processes. The emergence of cognitive neuroscience.
- The biological approach: the influence of genes, biological structures and neurochemistry on behaviour. Genotype and phenotype, genetic basis of behaviour, evolution and behaviour.

Research Methods:

- Experimental method. Types of experiment, laboratory and field experiments; natural and quasi-experiments.
- Observational techniques. Types of observation: naturalistic and controlled observation; covert and overt observation; participant and non-participant observation.
- Self-report techniques. Questionnaires; interviews, structured and unstructured.
- Correlations. Analysis of the relationship between co-variables. The difference between correlations and experiments.
- Aims: stating aims, the difference between aims and hypotheses.
- Hypotheses: directional and non-directional.
- Sampling: the difference between population and sample; sampling techniques including: random, systematic, stratified, opportunity and volunteer; implications of sampling techniques, including bias and generalisation.
- Pilot studies and the aims of piloting.
- Experimental designs: repeated measures, independent groups, matched pairs.
- Observational design: behavioural categories; event sampling; time sampling.
- Questionnaire construction, including use of open and closed questions; design of interviews.
- Variables: manipulation and control of variables, including independent, dependent, extraneous, confounding; operationalisation of variables.
- Control: random allocation and counterbalancing, randomisation and standardisation.
- Demand characteristics and investigator effects.
- Ethics, including the role of the British Psychological Society's code of ethics; ethical issues in the design and conduct of psychological studies; dealing with ethical issues in research.
- The role of peer review in the scientific process.
- The implications of psychological research for the economy.
- Quantitative and qualitative data; the distinction between qualitative and quantitative data collection techniques.
- Primary and secondary data, including meta-analysis.
- Descriptive statistics: measures of central tendency mean, median, mode; calculation of mean, median and mode; measures of dispersion; range and standard deviation; calculation of range; calculation of percentages; positive, negative and zero correlations.
- Presentation and display of quantitative data: graphs, tables, scattergrams, bar charts.
- Distributions: normal and skewed distributions; characteristics of normal and skewed distributions.

Sociology

Families and Households

The relationship of the family to the social structure and change	Revise d?
 Can I describe the sociological definitions of a family and household? Can I explain and evaluate different perspectives on the family? Can I explain ways that families are affected by social policies and give examples of social policies in the UK since the 1970s? Can I explain sociological perspectives on these policies? 	

Changing family patterns	Revise d?
 Can I explain and evaluate the personal life perspective on family patterns and diversity? Can I describe and explain changing patterns in divorce rates? Can I describe and explain changing patterns in marriage and cohabitation rates, and LAT relationships? Can I describe and explain changing patterns in lone-parenthood and reconstituted families? Can I explain and evaluate sociological explanations for changes to the extended family? Can I explain and evaluate modernist views on family diversity? Can I explain and evaluate postmodernist views on family diversity? 	

Gender roles	Revise d?
 Can I explain and evaluate Parsons' views on instrumental and expressive roles? Can I explain and evaluate Bott's study on segregated and joint conjugal roles? Can I explain and evaluate the March of Progress view on symmetrical gender roles in the family Can I explain and evaluate feminist views on gender roles in the family Can I explain and evaluate cultural explanations for the division of labour? Can I explain and evaluate material explanations for the division of labour Can I explain and evaluate sociological explanations for gendered power dynamics in relationships? 	

ĺ	Childhood	Revised?
	Can I explain what is meant by 'the social construction of childhood'?	
l	Can I explain reasons why the modern understanding of childhood came to be?	

- Can I explain and evaluate different views on the future of childhood?
- Can I explain and evaluate March of Progress views on the position of children in society today?
- Can I explain the new sociology of childhood?

Demographic trends	Revised?
 Can I describe and explain changes to the birth and total fertility rate since 1900? 	
 Can I describe and explain changes to the death rate, IMR and life expectancy since 1900? 	
 Can I explain the impact of the ageing population on the family and society since 1900? 	
 Can I explain the changes to migration rates that have taken place during the 20th and 21st centuries, and the impacts these have had on the family and society? Can I explain how globalisation has impacted migration? 	

Research Methods

Topic	Revised?
Quantitative and qualitative methods of research; research design	
Sources of data, including questionnaires, interviews, participant and non-participant	
observation, experiments, documents and official statistics	
The distinction between primary and secondary data, and between quantitative and	
qualitative data	
The relationship between positivism, interpretivism and sociological methods; the	
nature of 'social facts'	
The theoretical, practical and ethical considerations influencing choice of topic,	
choice of method(s) and the conduct of research.	
Quantitative and qualitative methods of research; research design	
Sources of data, including questionnaires, interviews, participant and non-participant	
observation, experiments, documents and official statistics	
The distinction between primary and secondary data, and between quantitative and	
qualitative data	
Students must be able to apply sociological research methods to the study of	
education.	

Education

Topic	Revised?
Functionalist and New Right explanations of the role and functions of	
the education system, eg in relation to social solidarity, skills teaching,	
meritocracy, selection and role allocation.	
Marxist explanations of the role and functions of the education system,	
eg in relation to ideological state apparatuses, reproduction of social class	
inequality, legitimation of social class inequality.	
Patterns and trends in differential educational achievement by social class, ethnicity and gender, eg in relation to GCSE results.	
Different sociological explanations of social class differences in	
educational achievement in relation to external factors (outside the	
education system), eg cultural deprivation, material deprivation and cultural	
capital.	
Different sociological explanations of social class differences in	
educational achievement in relation to internal factors and processes	
within schools, eg teacher labelling, the self-fulfilling prophecy, pupil	
subcultures and pupils' class identities.	
Different sociological explanations of ethnic differences in educational	
achievement in relation to external factors, eg cultural deprivation, material	
deprivation and racism in wider society.	
Different sociological explanations of ethnic differences in educational	†
achievement in relation to internal factors, eg racist labelling, the self-	
fulfilling prophecy, pupil subcultural responses, ethnic identities, institutional	
racism and the ethnocentric curriculum.	
Different sociological explanations of gender differences in educational	
achievement in relation to external factors, eg changes in the family and	
labour market affecting women and men and the influence of feminist ideas.	
Different sociological explanations of gender differences in educational	
achievement in relation to internal factors, eg the curriculum, selection and	
marketisation, feminisation of education, pupil subcultures and gender	
identities.	
Patterns and trends in subject choice by gender. Different sociological	
explanations of gender differences in subject choice, eg in relation to subject	
image, teaching and learning styles and primary socialisation.	
The impact of educational policies of selection, marketisation and	
privatisation , such as the tripartite system and the post-1988 education	
system, in relation to educational standards and class differences of	
outcome; the globalisation of educational policy.	
The impact of educational policies aimed at achieving greater equality	
of opportunity or outcome, eg the comprehensive system, compensatory	
education policies, education action zones and tuition fees.	
Education policies in relation to gender and ethnic differences and their	
impact, eg GIST, WISE and multicultural education.	
Different sociological explanations of the impact of educational	
policies, eg in relation to parentocracy and differences in economic and	
cultural capital.	

Spanish

Social issues and trends

Students must study the themes and sub-themes below in relation to at least one Spanish-speaking country. Students must study the themes and sub-themes using a range of sources, including material from online media.

Aspects of Hispanic society

Students may study all sub-themes in relation to any Spanish-speaking country or countries.

- 1 Modern and traditional values (Los valores tradicionales y modernos)
 - o Los cambios en la familia
 - o Actitudes hacia el matrimonio/el divorcio
 - o La influencia de la Iglesia Católica
- 2 Cyberspace (El ciberespacio)
 - o La influencia de internet
 - o Las redes sociales: beneficios y peligros
 - o Los móviles inteligentes en nuestra sociedad
- 3 Equal rights (La igualdad de los sexos)
 - o La mujer en el mercado laboral
 - o El machismo y el feminismo
 - o Los derechos de los gays y las personas transgénero

Multiculturalism in Hispanic society

Students may study all sub-themes in relation to any Spanish-speaking country or countries.

- 4 Immigration (La inmigración)
 - o Los beneficios y los aspectos negativos
 - o La inmigración en el mundo hispánico
 - o Los indocumentados problemas
- 5 Racism (El racismo)
 - o Las actitudes racistas y xenófobas
 - o Las medidas contra el racismo
 - o La legislación anti-racista
- 6 Integration (La convivencia)
 - o La convivencia de culturas
 - o La educación
 - o Las religiones