basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

2020
CONTENT PHASE PLANS
GRADE 7 – 9

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1. Introduction

The National Curriculum Statement, Grades R-12 was approved as National Policy and published in the Government Gazette 34600, Notices 722 and 723 of 12 September 2011.

The National Curriculum Statement, Grades R-12 comprises:

- The Curriculum and Assessment Policy Statements for all approved subjects for Grades R-12;
- The National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grades R-12; and
- The National Protocol for Assessment.

The Curriculum and Assessment Policy Statement (CAPS) is a single, comprehensive, and concise document developed for all subjects listed in the National Curriculum Statement Grades R-12 and is arranged into Four Sections.

The National State of Disaster due to Covid-19 and the ensuing lockdown has created a unique situation which has disrupted the school calendar thus impacting on the implementation of the Curriculum and Assessment Policy Statement (CAPS) for the 2020 academic year. To mitigate the impact of the Covid-19 lockdown, the Department of Basic Education (DBE) working in collaboration Provincial Education Departments (PEDs), has put together a framework for curriculum recovery plans the 19 lockdown. The framework, which was consulted with key stakeholders in the sector, proposes a revised school calendar and curriculum reorganization and trimming as some of the strategies to create opportunities for curriculum recovery.

In the context of the framework for the school curriculum recovery plan whose overarching aim is to ensure that the critical skills, knowledge, values and attitudes outlined in the CAPS are covered over a reduced time period, the purpose of curriculum reorganisation and trimming is to:

- Reduce the envisaged curriculum to manageable core content including skills, knowledge, attitudes and values so that schools have ample room for deep and meaningful learning
- Define the core knowledge, skills, attitude to be taught and assessed more specifically so that it provides guidance and support to teachers;
- Align curriculum content and assessment to the available teaching time;
- Maintain the alignment in the learning trajectory for learners, without compromising learners' transition between the grades; and
- Present a planning tool to inform instruction during the remaining school terms

The curriculum trimming and reorganisation maintain and support the foundational principles of the National Curriculum Statement (NCS) Grades R – 12 as stated in the Curriculum and Assessment Policy Statement (CAPS) namely:

- Social transformation: ensuring that the educational imbalances of the past are redressed, and that equal
- educational opportunities are provided for all sections of the population;
- Active and critical learning: encouraging an active and critical approach to learning, rather than rote and uncritical learning of given truths;
- High knowledge and high skills: the minimum standards of knowledge and skills to be achieved at each grade are specified and set high, achievable standards in all subjects;
- Progression: content and context of each grade shows progression from simple to complex
- Human rights, inclusivity, environmental and social justice: infusing the principles and practices of social and environmental justice and human rights as defined in the Constitution of the Republic of South Africa.

- Valuing indigenous knowledge systems: acknowledging the rich history and heritage of this country as important contributors to nurturing the values contained in the Constitution; and
- Credibility, quality and efficiency: providing an education that is comparable in quality, breadth and depth to those of other countries.

In addition, the principles below guided the process of curriculum reorganisation and trimming:

- Maintain the spiral development of values, attitudes, concepts and skills, extension, consolidation and deeper understanding leading learners towards the final learning outcomes.
- Efficiency – less teaching time but more effective learning outcomes.
- Inclusivity – learning experience must cater for different types of learners who are differently abled by providing different types of learning experiences.
- Validity – the relevance of the content to the stated goals and outcomes of the curriculum.
- Utility –the content must lead to the acquisition of values, attitudes, skills and knowledge that are considered useful for transition to the next level and have relevance to the contexts in which learners live.
- Feasibility – analyse and examine the content in the light of the time and resources available to the schools, considering the current socio- economic and political climate.
- Coherence – Systematic curriculum mapping must have horizontal, vertical, subject area and interdisciplinary coherence; and
- Emphasise assessment for learning as a teaching strategy as opposed to assessment of learning to achieve the learning outcomes of each grade and subject.

2. Purpose

The purpose of the revised phase plan and revised annual national teaching plans is to:

- ensure that meaningful teaching proceeds during the revised school calendar.
- assist teachers with guided pacing and sequencing of curriculum content and assessment.
- enable teachers to cover the essential core content in each phase within the available time.
- address assessment overload to recoup time loss.
- assist teachers with planning for the different forms of assessment.
- ensure learners are adequately prepared for the subsequent year/s in terms of content, skills, knowledge, attitudes, and values

3. Implementation Dates

To meet the above-mentioned objectives, Section 3 of the CAPS, which deals with the overview of topics per term and annual teaching plans per subject have been trimmed and/or reorganised for the year 2020. The revised teaching and assessment plans are effective from the *1st* June 2020.

4. Revised Teaching Plans per Subject

This document presents the content phase plan for Grade 7 – 9.

1. Creative Arts

1.1 Dance

Content Map Grade 7 – 9

	Subject: Creative Arts: Dance		**Grade: 7, 8, 9**
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
Topic 1 Dance Performance	Dance Conventions: greeting, use of space & controls Warm Up: gradually developing a warm up ritual, introducing the principles of good posture and alignment, arm movements Floor Work: limbering, joint mobility, body part isolation Leg Strengthening & Arm movements: Knee bends, rises, simple leg brushes/shuffles & footwork Transfer of weight: side to side, backward & forward, arm coordination Turns: Eye focus/Spotting, arm coordination Aerial Movements(Jumps), with safe landing, locomotor movements, foot isolations Steps from South African Dance: Steps with rhythmic variations Cool Down: Varied stretches	Dance Conventions: greeting, use of space & controls Warm Up: Build on a ritual focusing on posture & alignment Floor Work: Core stability, strengthening limbs Leg Strengthening: Joint mobility and control: knee bends in parallel and turned out, rises, low brushes, kicks Transfer of weight: Lunges, Circular leg movements, changing directions, arm coordination. Turn on the spot & on one leg with spotting Aerial Movements (Jumps), with safe landing, locomotor movements, foot isolations Steps from a Social **or** Popular Dance: Presentation skills: eye focus, commitment to movement, memory of steps Cool down: Flowing, lyrical movements to slow, calm music with stretching.	Dance Conventions: Use of space, respect for others, class discipline Warm Up: Build on a ritual focus on safe dance practice, placement and kinesthetic awareness Floor Work: Core stability and side bends, hip mobility and strengthening exercises of legs and feet Leg Strengthening, Joint Mobility and Control: Knee bends, rises, with coordinating arms, low and high brushes, balancing on one leg, kicks/extensions in all directions Transfer of weight & Turns: At a slow pace with control & balance, circular leg movements, arm coordination and turns travelling with spotting Building stamina through jumps: Step hops, galloping and leaping with coordinating arms, changing directions to varied music genres and rhythms, varying in dynamics Dance steps and style from an indigenous South African Culture: Short, fast dance sequences with attention to detail, commitment to movement, focus, musicality and awareness between dancers Cool down: Flowing, lyrical movements & relaxation imagery followed by gentle slow stretching

	Subject: Creative Arts: Dance		Grade: 7, 8, 9
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
Topic 2 Dance Improvisation & Composition	Dance elements: Space: levels, direction, pathways, shape, size. Time - tempo, rhythm, accent. Forces - flow of energy Relationships: work in pairs/groups in response to different stimuli, eye focus & eye contact Composition of a short dance: use South African stimuli – photographs, pictures, Poems, songs, themes or props	Dance elements: Space, Time & Forces Relationships – leading and following, unison movement, active and passive Composition exploring an idea, mood or thought using locomotor and non-locomotor movements, varying in direction, level, tempo	Dance elements: Contrasting dynamics using natural gestures with exaggeration, slow motion and repetition Composition based on different stimuli & Relationships using Composition Structures: beginning, ending, repetition, stillness, transitions, unison & canon
Topic 3 Dance theory and Literacy	Dance terminology in practical class: Dance Elements: space, time, force, relationship & importance of spotting Importance of good posture & alignment, warming up & cooling down Different dance forms: at least 2 and how movements may convey meaning	Dance terminology in practical class: Code of conduct, purpose of warm up and cool down Social/popular dance: integrated with practical work Dance and related Careers: integrated in practical work	Dance terminology in practical class: Self-reflection on own dance experience Principle of posture & alignment, use of core, spine, safe landing Dance Literacy: Simple analysis of own dance & others' dance

1.2 Drama

Content Map Grade 7 – 9

	Subject: Creative Arts - Drama		**Senior Phase**
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
Topic 1: Dramatic Skills Development	**Vocal Development** Explore: relaxation exercises breathing exercises: awareness of breath resonance exercises articulation exercises and tongue twisters **Physical Development** Release of tension, loosening and energising the body Warm-up using imagery to explore movement dynamics Lead and follow movements in pairs, small groups and as a class	**Vocal Development** Explore: relaxation exercises breathing exercises - breath control and capacity correct posture and alignment - (neutral position) tone and resonance exercises articulation exercises interpretation skills - using pause, pitch, pace, stress, intonation and tone **Physical Development** Release of tension, loosening and energising the body Concentration and focus in movement Trust exercises Creating character and mood through movement	**Vocal Development** Explore: relaxation exercises breathing exercises - breath control and capacity correct posture and alignment - (neutral position) tone and resonance exercises articulation exercises projection exercises interpretation skills, using pause, pitch, pace, projection, intonation and tone **Physical Development** Release of tension, loosening and energising the body Development of focus through exercises Spinal warm-up Understanding purpose of warming up and cooling down Creating an environment through the body Physical characterisation
Topic 2: Drama Elements in Playmaking	**Short improvised dramas to explore structure of drama: beginning, middle and end.** Shape and development of the scene Exploration of relevant themes Groupings and physical relationships in space Consideration of the audience in exploring different spatial arrangements Characterisation: observe, imitate and invent detail Drama elements in cultural and social events compared to their use in theatre Reflection on drama: give and receive feedback constructively Resources like media, video clips, pictures and career discussions to support reflection and appreciation.	**Explore elements in a practical performance:** Structure of the performance Shape and focus of the performance Specialised style, e.g. melodrama, comedy, tragedy, farce, musical and puppet show. Technical resources to enhance the performance Resources like media, video clips, pictures and career discussions to support reflection and appreciation.	**Explore elements in a practical performance:** Purpose of performance Basic staging conventions Exploration of performance space: appropriate groupings and movement patterns Technical elements: design, develop and make Resources like media, video clips, pictures and career discussions to support reflection and appreciation.
Topic 3: Interpretation and Performance of Selected	**Interpretation and performance techniques in:** Folktales Choral verse Reflection on own and others' performances, constructive feedback	**Interpretation and performance techniques in:** Indigenous poems/praise poetry written by South African poets, performed individually and/or in groups. Dialogues Reflection on own and others' performances, constructive feedback	**Interpretation and performance techniques in:** Dramatised prose Scene work (theatre/television) Reflection on own and others' performances, constructive feedback

	Subject: Creative Arts - Drama		Senior Phase
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
Dramatic Forms	Resources like media, video clips, pictures and career discussions to support reflection and appreciation.	Resources like media, video clips, pictures and career discussions to support reflection and appreciation.	Resources like media, video clips, pictures and career discussions to support reflection and appreciation.

1.3 Music

Content Map Grade 7 – 9

	Subject: Creative Arts: Music		**Grade: 7- 9**
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade**	**Grade**
Topic 1 **Music literacy** **Content/concepts/skills**	• Duration: introduction of the dotted note, also in relation to: - crotchets - quavers - minims - semibreves - dotted minim • clapping or drumming short rhythmic phrases that use crotchets, minims, quavers dotted minims and semibreves	**Musical terminology** • Dynamics: piano, forte; crescendo; diminuendo • Tempo: allegro; andante	**Duration and pitch** • Write the scales of C, G, D and F Major in treble and bass clefs in an interesting rhythm making use of the note values learnt • Triads on I, IV and V (close position)
Topic 2 **Music listening**	• listening to a variety of recorded or live music and describing the: - tempo (fast/slow; faster/slower) - dynamics (soft/loud; softer/louder - lyrics of the music	• Active listening to identify the elements and principles of music in a variety of musical styles (Western Classical, African, Indian, popular music): -- Meter: duple, triple -- Dynamics (piano, forte) -- Repetition (rhythmic and melodic) -- Contrasts in tempo and texture -- Meaning of the lyrics	
Topic 3 **Performing and creating music**	• breathing exercises • continuous development of in-tune singing through a repertoire of songs that include - folksongs (indigenous songs, cultural songs); - light music; - rounds; and - part singing (songs with descants).	• Breathing and technical exercises suitable for the instrument or voice • Group or solo performances from the standard repertoire of Western/African/Indian/popular musical styles: -- choral works -- group instrumental works -- solo vocal works -- solo instrumental works • Performing musical works that express a personal or social issue • Accompanying choral works with body percussion or found or self-made instruments or traditional instruments, keyboard or guitar • Creating own music in group context by -- Improvising on a melodic ostinato or riff -- writing four-line lyrics based on a personal or social issue and adding own melody to it -- Composing a one minute jingle based on a social issue using the voice or available software	

TERM 3: 03 AUG 2020 – 23 SEP 2020

	Subject: Creative Arts: Music		**Grade: 7- 9**
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade**	**Grade**
Topic 1 **Music literacy** **Content/concepts/skills**	• treble and bass clef • letter names of notes on the treble and bass clef	**Musical terminology** • Dynamics: piano, forte; crescendo; diminuendo • Tempo: allegro; andante	**Music Terminology** • Revised music terminology
Topic 2 **Music listening**	• active listening to a variety of recorded or live music by clapping or humming or moving along	• Active listening to identify the elements and principles of music in a variety of musical styles (Western Classical, African, Indian, popular music): -- Meter: duple, triple -- Dynamics (piano, forte) -- Repetition (rhythmic and melodic) -- Contrasts in tempo and texture -- Meaning of the lyrics	• Listen to excepts from a musical (e.g. West Side Story) or an opera (e.g. Magic Flute, Nabucco): -- Write a storyline of a musical/opera -- Sing along with one of the choruses/solos • Listening to one of the following styles: -- Reggae, Kwaito, R&B, African Jazz • Write own impression of the music focusing on the -- The artist/s -- Special features of the music with regard to rhythm, tempo, instruments, voices -- Story of the music/lyrics
Topic 3 **Performing and creating music**	• breathing exercises • continuous development of in-tune singing through a repertoire of songs that include - folksongs (indigenous songs, cultural songs); - light music; - rounds; and - part singing (songs with descants; soprano/soprano; soprano/alto; soprano/baritone) • accompanying songs with body percussion, found or self-made instruments, traditional instruments, orff instruments • african drumming	• Breathing and technical exercises suitable for the instrument or voice • Group or solo performances from the standard repertoire of Western/African/Indian/popular musical styles: -- choral works -- group instrumental works -- solo vocal works -- solo instrumental works • Performing musical works that express a personal or social issue • Accompanying choral works with body percussion or found or self-made instruments or traditional instruments, keyboard or guitar • Creating own music in group context by -- Improvising on a melodic ostinato or riff -- writing four-line lyrics based on a personal or social issue and adding own melody to it -- Composing a one minute jingle based on a social issue using the voice or available software	• Breathing and technical exercises suitable for the instrument or voice • Group or solo performances from the appropriate repertoire of Western/African/Indian/popular musical styles: -- Choral works -- Group instrumental works -- Solo vocal works -- Solo instrumental works • Adding music to words of a poem (four lines)

TERM 4: 28 SEP 2020 – 09 DEC 2020

	Subject: Creative Arts: Music		**Grade: 7- 9**
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade**	**Grade**
Topic 1 **Music literacy** **Content/concepts/skills**	• treble and bass clef • letter names of notes on the treble and bass clef • duration • clapping or drumming short rhythmic phrases that use crotchets, minims, semibreves, quavers and semiquavers • pitch: sight singing melodic phrases from known and unknown songs using tonic sol-fa • clapping or drumming polyrhythmic phrases	**Duration** • Meter – 2/4; 3/4; 4/4; compound duple 6/8 • Reading (clapping or playing) music in 2/4; 3/4; 4/4; compound duple 6/8 **Pitch** • Consolidation of the construction of the major scale: C, G, D and F Major • Reading (singing or playing) music in the keys of C, G, D and F Major **Music terminology** • Tempo: moderato, presto, ritardando, a tempo • Articulation: legato, staccato	**Music Terminology** • Revised music terminology
Topic 2 **Music listening**	• listening to a variety of recorded or live music and describing the: - meter of the music as duple or triple or quadruple time - tempo (fast/slow) - dynamics (soft/loud) - timbre - meaning or story of the music - lyrics of the music - texture of the music	• Listen to recorded or live music and write own impression focusing on: -- Message of the music (lyrics) -- Instruments/voices used -- Tempo -- Dynamics -- Placing it in a cultural or social context -- The performing artist or composer	• Listen to excepts from a musical (e.g. West Side Story) or an opera (e.g. Magic Flute, Nabucco): -- Write a storyline of a musical/opera -- Sing along with one of the choruses/solos • Listening to one of the following styles: -- Reggae, Kwaito, R&B, African Jazz • Write own impression of the music focusing on the -- The artist/s -- Special features of the music with regard to rhythm, tempo, instruments, voices -- Story of the music/lyrics
Topic 3 **Performing and creating music**	• breathing exercises • continuous development of in-tune singing through a repertoire of songs that include - folksongs (indigenous songs, cultural songs); - light music; and - rounds. • accompanying songs with body percussion, found or self-made instruments, traditional instruments, orff instruments • african drumming • creating own vocal and instrumental music in group and solo context: - rhythmic and melodic improvisation on an ostinato or riff - sound pictures based on a story or poem using the voice or instruments - writing own four-line song lyrics and melody based on a social issue	• Breathing and technical exercises suitable for the instrument or voice • Group or solo performances from the standard repertoire of Western/African/Indian/popular musical styles: -- choral works -- group instrumental works -- solo vocal works -- solo instrumental works • Creating own music in group and solo context by -- composing a musical work and adding another art form to it	• Breathing and technical exercises suitable for the instrument or voice • Group or solo performances from the appropriate repertoire of Western/African/Indian/popular musical styles: -- Choral works -- Group instrumental works -- Solo vocal works -- Solo instrumental works • Adding music to words of a poem (four lines)

1.4 Visual Arts

Content Map Grade 7 – 9

	Subject: Creative Arts: Visual Art		**Phase: Senior**
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
Topic 1: Create in 2D	Own and wider world: observation and interpretation of *own* visual world through various approaches to • drawing • painting (colour-mixing, brush manipulation, personal interpretation) • exploration of a variety of media • simple etching techniques (e.g. scraperboard) Using • art elements (shape, line, tone, texture, colour to include complementary colour, monochromatic colour) • design principles • design projects using art elements and design principles • lettering and design projects: images and text • pattern-making (drawings, collages, designs, surface decorations) • variation of paper size and format (different scale and degrees of detail)	Own and wider world: observation and interpretation of *own and broader* visual world through increasing complexity of • drawing • painting • exploration of media • etching techniques Using • art elements (same as before, but include analogous/related colour) • design principles • drawing and painting with extended use of media and techniques • design projects • lettering and design projects • pattern-making • variation of paper size and format	Own and wider world: observation and interpretation of *global* visual world. through increasing complexity of • drawing • painting • exploration of media • etching techniques Using • art elements (same as before, but include analogous/related colour) • design principles • drawing and painting with extended use of media and techniques • design projects • lettering and design projects • pattern-making • variation of paper size and format
Topic 2 Create in 3D	• Three-dimensional art works and design projects based on *own* world focusing on art elements and design principles with emphasis on accurate or imaginative representation; conscious use of space; spatial awareness: developing understanding of plane, depth and visual perspective	• Three-dimensional art works and design projects of increasing complexity based on *wider* world focusing on art elements and design principles • Themes to explore the social world, and popular culture	• Three-dimensional art works and design projects of increasing complexity based on *global* world focusing on art elements and design principles • Themes to explore current events in the global world • Personalized construction and modelling techniques to further deepen spatial awareness

	Subject: Creative Arts: Visual Art		Phase: Senior
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
	• Themes to explore learner's interests • Construction and modelling techniques to explore spatial awareness • Manipulation of a variety of materials and tools using good craftsmanship and safety precautions • Concern for the environment: use of recyclable materials	• More complex construction and modelling techniques to deepen spatial awareness • Extended manipulation of a variety of materials and tools using good craftsmanship and safety precautions • Concern for the environment: use of recyclable materials	• More complex manipulation of a variety of materials and tools using good craftsmanship and safety precautions • Concern for the environment: use of recyclable materials
Topic 3 **Visual Literacy**	• Communication skills: express, identify/name, question and reflect through looking, talking, listening and writing about the visual world through the language of art elements and design principles • Interpret, analyse and recognise symbolic language with reference to - buildings - still life - local craft and crafters - masks - groups of figures • The role of the artist in own society as contributor and observer • Introducing research skills	• Communication skills: express, identify/name, question and reflect through looking, talking, listening and writing about the visual world through the language of art elements and design principles • Interpret, analyse and recognise symbolic language with reference to - creative lettering - functional containers - fashion design careers in the arts • The role of the artist in wider society and careers in the arts and design fields • Developing research skills Planning and preparation: with guidance, collect resources, visual information and preliminary drawings and sketches in preparation for the final projects	• Communication skills: express, identify/name, question and reflect through looking, talking, listening and writing about the visual world through the language of art elements and design principles • Interpret, analyse and recognise symbolic language with reference to - portraits - the role of the artist - social commentary - popular culture - design in public commentary • The role of the artist in global society as contributor, observer and social commentator • Further development of research skills Planning and preparation: same as before but works independently

2. Economic and Management Sciences (EMS)

Content Map Grade 7 – 9

	Subject: Economic and Management Sciences		Grade: 7-9
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
The Economy	• Definition of production: Inputs and outputs • Technology in the production process.	Markets Types of markets – goods and services market; factor market (labour and financial markets	Demand and Supply- Law of demand, law of supply, demand schedule, supply schedule, demand curve, supply curve, graphical Illustration, equilibrium point, equilibrium quantity, equilibrium price.
	• Meaning of economic growth.		Circular flow
Financial Literacy	**Accounting Concepts:** Capital; Assets; Liability; Income; Expenses; Profit; Losses; Budgets; Savings; Banking; Financial records; Transactions.	**Accounting Cycle** Transactions; source documents; subsidiary journals; General Ledger; Trial Balance. Introduction of the Cash Journals of a service business	CRJ, CPJ of the Trading business, posting, trial balance and the effect of the cash transaction of the Trading business on the Accounting Equation. Credit transactions-debtors and creditors, posting to the debtors, creditors ledger and the effect of credit transactions on the Accounting equation. Recording payments of creditors to the CPJ and recording of debtors into the CRJ
	Income and expenses Personal statement of net worth; Types of business income; Types of business expenses; Savings and investments in business.	**Cash Receipts Journal (services)** Concept of a Cash Receipts Journal (CRJ) of a service business; formats and uses of the columns in the CRJ; entering of cash transactions in the CRJ; closing off the CRJ; Effect of cash transactions on the accounting equation (receipts).	
	Budgets Definition of a budget; Income; Expenditure; Business budget.	**Cash Payments Journal** Concept of a Cash Payments Journal (CPJ) of a service business; formats and uses of the columns in the CPJ; entering of cash transactions in the CPJ; closing off the CPJ; Effect of cash transactions on the accounting equation (payments).	
	• Personal savings and Community saving scheme; Purpose of savings; role of banks.	**General Ledger and Trial Balance (service)** The double entry-principle; the "T" accounts; format of the General Ledger; sections within the General Ledger; opening accounts in the General Ledger, posting/recording of transactions from CRJ and CPJ of the service business to the General Ledger, balancing of the General Ledger, preparing of a Trial Balance	
	• Services offered by banks; opening a savings account		
Entrepreneurship	**Formal and Informal Businesses;** • Types of businesses (trading, manufacturing and service both formal and informal)	Factors of production Capital – borrowed and own capital; labour – unskilled, semi-skilled and skilled labour	Business plan, functions of the business, trade unions, sectors of the economy
	• **Definition of an Entrepreneur;** • Characteristics of an entrepreneur; • Skills of an entrepreneur; • Entrepreneurial actions of buying and selling, producing and making a profit	**Forms of Ownership** Sole traders; partnerships; close corporations; private and public companies and the role in sustainable use of natural resources	
	• Analysis of strengths and weaknesses, opportunities, threats	**Levels and Functions of Management**	

	(SWOT); • Setting goals; • Achieving goals; The concept of advertising; • Media used in advertising; • Principles of advertising;	Different levels of Management; management tasks such as Planning, Organizing, Leading, and Controlling; Characteristics of good Management;	

3. Life Orientation

Content Map Grade 7 – 9

	Subject: Life Orientation		Grade: 7- 9
	Revised Content Map per Phase		
Key Topic	**Grade: 7**	**Grade 8**	**Grade: 9**
Development of self in society	• Food that boost the Immune system during COVID-19 • Concepts: personal diet and nutrition	• Basic hygiene principles of COVID-19 Concepts: • Relationships and Friendships	Basic hygiene principles of COVID-19 Goal-setting skills: personal lifestyle choices • Challenging situations: depression, grief, loss, trauma crisis and anxiety
Health, social and environmental responsibility	• Basic hygiene principles of COVID-19 Substance abuse • Concept: environmental health • Common diseases: TB, diabetes, epilepsy, obesity, anorexia, HIV and AIDS including COVID-19 -Management of tuberculosis, diabetes, epilepsy, HIV and AIDS including COVID -19	• Basic hygiene principles (issues of COVID-19) and the need for clean water • Social factors that contribute to substance abuse • Environmental health Issues • Decision-making about health and safety: HIV and AIDS including COVID-19 -Management of HIV and AIDS including COVID -19	• Basic hygiene principles of COVID-19 • Concept: volunteerism • Health and safety issues related to violence
Constitutional rights and responsibilities	•Basic hygiene principles of COVID-19 •Human rights asstipulated in the South African Constitution • Fair play in a variety of sport activities • Dealing with abuse • Role of oral traditions and scriptures of major religions	• Basic hygiene principles of COVID-19 • Nation building • Concept: human rights violations • Concept: gender equity • Concept: cultural diversity in South Africa • Contributions of organisations from various religions to social development	• Basic principles issues of COVID-19 • Issues relating to citizens' rights and responsibilities • Constitutional values • Contributions of various religions in promoting peace • Sport ethics
World of work	Importance of reading and studying (Self-management skills) • Career fields • Simulation of career related activities • Value and importance of work in fulfilling personal needs and potential	• Different learning styles (Self-management skills) • Six career categories • Relationship between performance in school subjects and interests and abilities • Decision-making process	Time-management skills • Reading and writing for different purposes • Options available after completing Grade 9 • Knowledge of the world of work • Career and subject choices

			• Study and career funding providers • Plan for own lifelong learning
Physical Education	**Physical Education** • Performs a sequence of physical activities including rotation, balance, elevation and rhythmic movements • Safety issues relating to movement activities (emphasize social distancing when performing a sequence of physical activities, no touching or holding each other, no sharing water bottles and towels. Always wear a mask, wash hands after the class activities).	**Physical Education** • Participation in a programme that improves movement techniques • Safety issues relating to movement activities (emphasize social distancing when participating in a programme that improves movement techniques, no touching or holding each other, no sharing water bottles and towels. Always wear a mask, wash hands after the class activities).	**Physical Education** • Participation and refinement of own and peer performance in movement activities • Safety issues relating to movement activities (emphasize social distancing when participating and refining their own and peer performance in movement activities, no touching or holding each other, no sharing water bottles and towels. Always wear a mask, wash hands after the class activities).
	Physical Education • Participation in an outdoor recreational activity • Participation and movement performance in an outdoor recreational activity • Safety issues relating to participation in recreational activities (emphasize social distancing when performing a sequence of physical activities, no touching or holding each other, no sharing water bottles and towels. Always wear a mask, wash hands after the class activities and equipment/s should be wiped with sanitized wet wipers).	**Physical Education** • Participation in an outdoor recreational activity • Participation and movement performance in an outdoor recreational activity • Safety issues relating to participation in recreational activities (emphasize social distancing when performing a sequence of physical activities, no touching or holding each other, no sharing water bottles and towels. Always wear a mask, wash hands after the class activities and equipment/s should be wiped with sanitized wet wipers).	**Physical Education** • Participation and refinement of own performance in an outdoor recreational activity • Participation and movement performance in an outdoor recreational activity (emphasize social distancing when performing a sequence of physical activities, no touching or holding each other, no sharing water bottles and towels. Always wear a mask, wash hands after the class activities and equipment/s should be wiped with sanitized wet wipers).

4. Mathematics

Content Map Grade 7 – 9

	Subject: Mathematics		Grade: 7 - 9
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
Common Fractions	• Addition and subtraction of fractions where one denominator is not a multiple of the other • Multiplication of common fractions, including mixed numbers, not limited to fractions where one denominator is a multiple of another	• Divide whole numbers and common fractions by common fractions • Calculate the squares, cubes, square roots and cube roots of common fractions	• All four operations, with numbers that involve the squares, cubes, square roots and cube roots of common fractions
Decimal Fractions	• Order, compare and place value of decimals to at least three decimal places and rounding off to at least 2 decimal places • Addition and subtraction of decimal fractions to at least three decimal places • Multiply decimal fractions to at least: ▪ 3 decimal places by whole numbers ▪ 2 decimal places by decimal fractions to at least 1 decimal place • Divide decimal fractions by whole numbers	• Multiplication of decimals by decimal fractions **not limited** to one decimal place • Divide decimal fractions by decimal fractions' • Calculate the squares, cubes, square roots and cube roots of decimal fractions	• Multiple operations with or without brackets, with numbers that involve the squares, cubes, square roots and cube roots of decimal fractions
Percentages	• Calculate the percentage of part of a whole • Calculate percentage increase or decrease of whole numbers • Recognize equivalence between common fraction, decimal fraction and percentage forms of the same number	• Calculate amounts if given percentage increase or decrease	
Integers	• Count, order and compare integers • Add and subtract with integers • Use commutative, associative and distributive properties of addition and multiplication for integers • Solve problems in contexts involving addition and subtraction with integers	• Multiply and divide with integers • Perform calculations involving all four operations with integers • Perform calculations involving all four operations with numbers that involve the squares, cubes, square roots and cube roots of integers	• Incorporated in the algebraic expressions and equations

	Subject: Mathematics		Grade: 7 - 9
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
		• Recognize and use additive and multiplicative inverses for integers • Solve problems in contexts involving multiple operations with integers	
Numeric and Geometric Patterns	Investigate and extend patterns looking for relationship or rules in own words	Investigate and extend patterns looking for relationship or rules in algebraic language	Investigate and extend patterns looking for relationship or rules in algebraic language
Algebraic Expressions	• Recognize and interpret rules or relationships represented in symbolic form • Identify variables and constants in given formulae and/or equations	• Recognize and identify conventions for writing algebraic expressions • Identify and classify like and unlike terms in algebraic expressions • Recognize and identify coefficients and exponents in algebraic expressions • Expand and simplify algebraic expressions	• Factorise algebraic expressions • Simplify algebraic expressions involving factorisation
Algebraic equations	• Solve equations by substitution, inspection and trial and improvement	• Solve equations by additive and multiplicative inverse	• Solve equations by additive and multiplicative inverse • Solve equations by factorisation
Functions and Relationships	• Determine input values, output values or rules for patterns and relationships using: ▪ flow diagrams ▪ tables ▪ formulae • Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: ▪ verbally ▪ in flow diagrams ▪ in tables ▪ by formulae ▪ by number sentences	• Incorporated in the algebraic expressions	• Extend determining input values, output values or rules for patterns and relationships to include equations • Extend determining, interpreting and justifying equivalence of different descriptions of the same relationship or rule to include representing the equivalence by means of: ▪ equations ▪ by graphs on a Cartesian plane

	Subject: Mathematics		Grade: 7 - 9
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
Graphs	• Analyse and interpret global graphs of problem situations, with special focus on the following trends and features: ▪ linear or non-linear ▪ constant, increasing or decreasing • Draw global graphs from given descriptions of a problem situation, identifying features listed above	• Extend the focus on features of graphs to include: ▪ maximum or minimum ▪ discrete or continuous • Draw global graphs from given descriptions of a problem situation, identifying features listed above • Use tables or ordered pairs to plot points and draw graphs on the Cartesian plane	• Extend the focus on features of graphs with special focus on the following features of **linear graphs**: ▪ x-intercept and y-intercept ▪ gradient • Extend drawing of graphs with special focus on: ▪ drawing linear graphs from given equations ▪ determining equations from given **linear graphs**
Geometry of 2D shapes	**Classification of 2 D shapes** • Describe, sort, name and compare triangles • Describe, sort, name and compare quadrilaterals • Describe and name parts of a circle **Similar and congruent 2D shapes** • Recognize and describe similar and congruent figures by comparing size and shape **Solving problems** • Solve simple geometric problems involving unknown sides and angles in triangles and quadrilaterals, using known properties.	**Investigating properties of geometric figures** • By construction, investigate the angles in a triangle, focusing on: ▪ the sum of the interior angles of triangles ▪ the size of angles in an equilateral triangle ▪ the sides and base angles of an isosceles triangle • By construction, investigate sides and angles in quadrilaterals, focusing on: ▪ the sum of the interior angles of quadrilaterals ▪ the sides and opposite angles of parallelograms **N.B. Provide learners with accurately constructed figures to investigate the properties** **Classification of 2 D shapes** • Identify and write clear definitions of triangles • Identify and write clear definitions of quadrilaterals focusing on sides **Similar and congruent 2D shapes** • Identify and describe the properties of congruent shapes • Identify and describe the properties of similar shapes **Solving problems** • Extend solving geometric problems to include definitions.	**Investigating properties of geometric figures** • By construction, investigate the angles in a triangle, focusing on the relationship between the exterior angle of a triangle and its interior angles • By construction, investigate sides, angles and diagonals in quadrilaterals, focusing on: ▪ the diagonals of rectangles, squares, parallelograms, rhombi and kites ▪ exploring the sum of the interior angles of polygons • By construction, explore the minimum conditions for two triangles to be congruent **N.B. Provide learners with accurately constructed figures to investigate the properties** **Classification of 2 D shapes** • Write clear definitions of quadrilaterals focusing on diagonals **Similar and congruent triangles** • Through investigation, establish the minimum conditions for congruent triangles

	Subject: Mathematics		Grade: 7 - 9
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
			• Through investigation, establish the minimum conditions for similar triangles **Solving problems** • Extend solving geometric problems to include properties of congruent and similar triangles.
Geometry of 3D objects	**Excluded**	**Excluded**	**Excluded**
Geometry of straight lines	Definitions	• Angle relationships • Solving problems	• Angle relationships • Solving problems
Transformation Geometry	• Perform transformations on a grid paper • Enlargements and reductions	To be done in Grade 9	• Perform transformations on a Cartesian plane • Extend transformations to include reflection in the line $y = x$
Construction of geometric figures	**Excluded**	**Excluded**	**Excluded**
Area and perimeter of 2D shapes	Use appropriate formulae to calculate perimeter and area of squares, rectangles and triangles to at least I decimal place and convert units from mm^2 to cm^2 and cm^2 to m^2	• Extend use of appropriate formulae to calculate perimeter and area of polygons to include circles to at least 2 decimal places and convert between appropriate SI units, including and up to km^2 • Calculate perimeter and area of complex figures	• Use appropriate formulae and conversions between SI units, to solve problems and calculate perimeter and area of polygons and circles. • Investigate how doubling any or all of the dimensions of a 2D figure affects its perimeter and its area
Surface area and volume of 3D objects	• Use appropriate formulae to calculate the surface area, volume and capacity of cubes and rectangular prisms • Describe the interrelationship between surface area and volume of the objects mentioned above • Use and convert between appropriate SI units, including: ▪ $mm^2 \leftrightarrow cm^2$ ▪ $cm^2 \leftrightarrow m^2$ ▪ $mm^3 \leftrightarrow cm^3$ ▪ $cm^3 \leftrightarrow m^3$ • Use equivalence between units when solving problems: ▪ $1\ cm^3 \leftrightarrow 1$ ml ▪ $1\ m^3 \leftrightarrow 1\ kl$	• Extend use appropriate formulae to calculate the surface area, volume and capacity of triangular prisms • Describe the interrelationship between surface area and volume of the objects mentioned above • Use and convert between appropriate SI units, including: ▪ $mm^2 \leftrightarrow cm^2 \leftrightarrow m^2 \leftrightarrow km^2$ ▪ $mm^3 \leftrightarrow cm^3 \leftrightarrow m^3$ ▪ $ml\ (cm^3) \leftrightarrow l \leftrightarrow kl$	• Extend use appropriate formulae to calculate the surface area, volume and capacity of cylinders • Investigate how doubling any or all the dimensions of right prisms and cylinders affects their volume

	Subject: Mathematics		Grade: 7 - 9
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade 8**	**Grade 9**
The Theorem of Pythagoras		Develop and use the Theorem of Pythagoras	Solve problems using the Theorem of Pythagoras
Collect, organize, represent, summarise and interpret data	• Complete data cycle with bar graphs, pie charts and histograms • Identify the largest and smallest scores in a data set and determine the difference between them in order to determine the spread of the data (range)	• Extend completion of data cycle with graphs to include broken line graphs • Summarise data using measures of dispersion, including: ▪ range ▪ extremes	• Extend completion of data cycle with graphs to include scatter plots • Extend summarising data using measures of dispersion to include outliers
Analyse data	• Critically analyse data by answering questions related to: ▪ data categories, including data intervals ▪ data sources and contexts ▪ central tendencies (mean, mode, median) ▪ scales used on graphs	• Extend critical analysis of data to include: ▪ samples and populations ▪ dispersion of data ▪ error and bias in the data	• Extend critical analysis of data to include: ▪ data collection methods ▪ summary of data ▪ sources of error and bias in the data
Report data	• Report data in short paragraphs by: ▪ drawing conclusions about the data ▪ making predictions based on the data ▪ identifying sources of error and bias in the data ▪ choosing appropriate summary statistics for the data (mean, median, mode)	• Extend reporting data in short paragraphs to include: ▪ choosing appropriate summary statistics for the data (mean, median, mode, range) ▪ the role of extremes in the data	• Extend reporting data in short paragraphs to include: ▪ choosing appropriate summary statistics for the data (mean, median, mode, range) ▪ the role of extremes and outliers in the data
Probability			• Consider situations with equally probable outcomes, and: ▪ determine probabilities for compound events using two-way tables and tree diagrams ▪ determine the probabilities for outcomes of events and predict their relative frequency in simple experiments ▪ compare relative frequency with probability and explains possible differences

5. Natural Sciences

Content Map Grade 7 – 9

Matter and Materials

	Subject: Natural Sciences		Grades: 7 – 9		
	Revised Content Map per Phase				
Key Topic	**Grade**	**Key Topic**	**Grade**	**Key Topic**	**Grade**
• Properties of Materials	7	• Atoms	8	• Compounds	9
• Separating Mixtures	7	• Particle model of matter	8	• Chemical reactions	9
• Acids, bases and neutrals	7	• Particle model of matter	8	• Reactions of metals with oxygen • Reactions of non-metals with oxygen • Acids & bases and pH value • Reactions of acids with bases: Part I	9
• Introduction to the Periodic table of Elements	7	• Atoms	8	• Compounds	9

Energy and Change

	Subject: Natural Sciences		Grades: 7 – 9		
	Revised Content Map per Phase				
Key Topic	**Grade**	**Key Topic**	**Grade**	**Key Topic**	**Grade**
• Sources of Energy	7	• Series and parallel circuits	8	• Electric cells as energy systems • Series and parallel circuits • Forces	9
• Potential & Kinetic energy	7	• Series and parallel circuits • Static electricity	8	• Electric cells as energy systems • Series and parallel circuits • Forces	9
• Heat Transfer	7	• Visible light	8	-	9
• Insulation & energy saving	7	• Series and parallel circuits	8	• Resistance • Series and parallel circuits • Cost of electrical power • Safety with electricity • Energy and the national electricity grid	9
• Energy transfer to surroundings	7	• Energy transfer in electrical systems • Series and parallel circuits	8	• Series and parallel circuits • Safety with electricity	9

Planet Earth and Beyond

	Subject: Natural Sciences		Grades: 7 – 9		
	Revised Content Map per Phase				
Key Topic	**Grade**	**Key Topic**	**Grade**	**Key Topic**	**Grade**
• Relationship of the sun to the earth	7	-	8	-	9
• Relationship of the moon to the earth	7	-	8	-	9
• Historical development of astronomy	7	-	8	-	9

6. Social Sciences

6.1 History

Content Map Grade 7 – 9

Content Overview: History Senior Phase

Terms	Revised Content Map per Phase		
	Grade 7	**Grade 8**	**Grade 9**
Term 1	The kingdom of Mali and the city of Timbuktu	The Industrial Revolution in Britain and Southern Africa from 1860 World War II (1919 – 1945)	World War II (1919 – 1945)
Term 2	The Transatlantic slave trade	The Mineral Revolution in South Africa	The Nuclear Age and the Cold War (1945 – 1990)
Term 3	Colonisation of the Cape in the 17th and 18th centuries	The scramble for Africa	Turning points in modern South African history 1948 and 1950s
Term 4	Co-operation and conflict on the frontiers of the Cape Colony in the early 19th century	World War I (1914 – 1918)	Turning points in modern South African history: 1960, 1976 and 1990

6.2 Geography

	Subject: Social Sciences (Geography)		Grade:7
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade**	**Grade**
Volcanoes, earthquakes and floods	• **Structure of the earth** ▪ Core, mantle, crust, How the crust moves: ▪ introduction to tectonic plates and plate movements • **Volcanoes** ▪ Location around the world (map), ▪ Why volcanoes occur. • **Earthquakes** ▪ Location of earthquakes around the world (map), ▪ Causes of earthquakes – link back to plate movements ▪ Effects of earthquakes – including injury and loss of life, disease, displacement of people, damage to infrastructure, fires and tsunamis ▪ Why some communities are at higher risk than others ▪ Reducing the impact – preparing for and responding to earthquakes ▪ Case study of a selected earthquake, case studies should be from this century • **Floods** ▪ Causes of floods – unusually heavy rain, environmental factors (such as farming, settlement, fires and loss of vegetation) and earthquakes (tsunamis) ▪ Effects of floods – including injury and loss of life; disease; displacement of people; soil erosion; damage to fields, buildings and infrastructure ▪ Why some communities are at higher risk than others ▪ Reducing the impact – preparing for and responding to floods ▪ Case study of a selected flood.		

	Subject: Social Sciences (Geography)		Grade:7
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade**	**Grade**
Population growth and change	• **Population concepts** ▪ Birth rates, death rates and population growth rates ▪ Infant mortality rates ▪ Life expectancy • **Factors affecting birth rates and death rates** ▪ Disease: Widespread illnesses such as HIV and AIDS, tuberculosis, malaria, diarrhoea ▪ Pandemics of the past such as the Black Death in Europe, smallpox at the Cape ▪ Economic status Family needs, attitudes and beliefs ▪ Conflict and wars ▪ Government policy (as in China) • **World population growth** ▪ Pattern of world population growth from 1 AD to present day (interpreting a line graph) ▪ Developments that have affected population growth: ▪ Increased food production ▪ Scientific developments – such as the increased understanding and control of disease and infection. ▪ Improved sanitation; canned food and refrigeration ▪ Improved health care.		
Natural resources and conservation in South Africa	• **Natural resources** ▪ Natural resources on earth – including water, air, forests, soil, animal and marine life ▪ Use and abuse of selected examples • **Management of resources** ▪ Concept of conservation – including reasons for conservation ▪ Conservation areas (including marine reserves) ▪ Purpose and location ▪ Case study of a selected area - Community		

	Subject: Social Sciences (Geography)		Grade:7
	Revised Content Map per Phase		
Key Topic	**Grade 7**	**Grade**	**Grade**
	conservation projects – examples - Eco-tourism – examples • **Water in South Africa** ▪ Who uses South Africa's water (pie graph of water users) ▪ Availability of water and requirement in South Africa ▪ River health and the care of catchment areas ▪ Disappearing wetlands and why conservation is necessary – case study ▪ Responsible use of water resources - agricultural, industrial and domestic users		

7. Technology

Content Map Grade 7 – 9

	Subject: Technology		Grades 7 - 9
	REVISED CONTENT MAP PER PHASE		
KEY TOPIC	**GRADE 7**	**GRADE 8**	**GRADE 9**
STRUCTURES	• Definition and purpose of structures to contain, protect, support, span. • Classification of structures: natural and man-made. Types of structures: shell, frame, solid – learners complete a worksheet. • Investigate: a cell phone tower – a frame structure • Case study: examine existing towers strengthened by triangulation, including pylons, windmills and mine headgear • Evaluate: worksheet on the advantages and disadvantages of telephone systems; landline vs. mobile. Learners complete a table. • Action research: to stiffen materials / structures • Practical activity 1 – Stiffen a structural material by tubing. • Practical activity 2 – Stiffen a structural material by folding. • Practical activity 3 – stiffen a frame structure by triangulation.	• Adapting materials to withstand forces – reinforcing concrete, plywood. • Selecting metal sections (I-beam, angle iron, T-bar, etc.) to withstand forces and to save material.	• Strength of materials under the action of forces: compression, tension, torsion, and shear. • Properties of construction materials: mass, density, hardness, stiffness, flexibility, corrosion. • Suitability of materials (fitness-for-purpose) in terms of properties, safety and cost effectiveness. • Task: identify and solve problems related to community on the far side of a river. • **COVERED DURING TERM 1**
STRUCTURES	• Investigating design issues: • Case study: study photographs of existing cell phone towers noting structural elements, reinforcing techniques and design issues such as visual pollution, stability, base size and centre of gravity. • Class discussion: how designers consider the needs of society in terms of technology while considering the impact on society and on the environment. • Case study – existing designs 1: examine the features of a school desk; write the design brief with specifications for a school desk. • Scenario: Cell phone towers are everywhere and are built using materials to ensure stability, strength and rigidity (stiffness). • Write the design brief: Individual learners write the design brief with specifications for a new cell phone tower. Note: 1. At a minimum, the cell phone tower can consist of struts made of found materials like "Elephant grass" or rolled paper dowels. It should show reinforcing using triangular webs, gussets and internal cross-bracing. Note 2: One of the design ideas must involve disguising the tower so that it blends in with the environment, avoiding visual pollution.		
TRUCTURES	• Sketch initial ideas: Individual learners draw free-hand sketches to show two different design ideas in 3D for a cell phone tower to be erected near the school. - Draw one idea using oblique projection. - Draw the other idea using single vanishing		

	Subject: Technology		Grades 7 - 9
	REVISED CONTENT MAP PER PHASE		
KEY TOPIC	**GRADE 7**	**GRADE 8**	**GRADE 9**
	point perspective • Each learner draws a working drawing for the cell phone tower showing one face in 2D. • Making includes working drawings, choosing materials and tools, and building the model. Measuring and simple tool skills must be developed. Safe, cooperative working is a key skill and needed in the world of work. Each learner lists the resources to be used.		
ELECTRICAL SYSTEMS AND CONTROL / ELECTRONICS	• Investigate: What is magnetism? • Practical investigation: Different types of permanent magnets – bar and horseshoe. • Experiment: Which metals are attracted by a magnet, and which are not? Learners test metal samples made of iron, steel (an iron alloy), nickel – which will stick. Learners test metal samples made of copper, lead, aluminium brass – which do not stick. Each learner completes a table of the results. Note: avoid iron coated with copper (like some paper clips) which will stick to magnets. • Case study: recycling scrap metals. Honest gleaners who collect scrap metal and deliver it to scrap metal dealers perform a valuable service to society. This good work is tainted by the criminal acts of thieves who steal copper telephone wire and steel manhole covers. • Simple electric circuits. Demonstrate a simple electric circuit with an energy source (cell), switch, conductor and a light bulb or buzzer. Sketch the circuit showing how to use component symbols.	• Generate electricity for the nation advantages and disadvantages of: • Thermal power stations (steam turbines – sources of heat: coal, gas, nuclear, sun). Hydroelectric power stations (including pumped storage schemes). • Wind-driven turbines. • Alternating current; step-up and step down transformers; distributing electric power across the country: the national grid. • Energy for heating, lighting and cooking in rural and informal settlements. • Energy from illegal connections; ethical issues; safety considerations. • Class discussion: equitable sharing of resources – industry needs reliable power for job creation; schools need power for lighting and computing. • Written report: Learners write a balanced report on these issues.	• Electronic systems and control – how simple electronic circuits and devices are used to make an output respond to an input. • Revise 1 – component symbols: • Cells in series and parallel. • Lamps in series and parallel. • Switches in series (AND logic) and parallel (OR logic). • Current in the circuit – conventional current flows from positive to negative. • Revise 2 – simple circuits: • One cell, switch, two lamps in series. • Two cells in series, switch, two lamps in series. • Ohm's Law quantitatively: *as voltage increases, current increases if resistance is constant*. • Learners should be able to read a given electronic circuit diagram and assemble the components into a working circuit. • Input components: electrochemical cells, photovoltaic cells
ELECTRICAL SYSTEMS AND CONTROL / ELECTRONICS	• Circuit diagram: Each learner draws the circuit using correct symbols for components. • DEMONSTRATION LESSON: A simple electromagnet. Make a simple electromagnet made by winding insulated copper wire around an iron nail. When an electric current flows in the wire coil (solenoid) a magnetic field is created and this is amplified by the iron core. Switching the current off causes the magnetic field to fade away. (Note: electromagnetism is a key to a wide range of technologies making up our modern world.)	• Revise: simple circuit components; input devices (electrochemical cell; generator; solar panel), output devices (resistor; lamp; heater; buzzer; motor); control device (switches). Note: Some devices can serve as input, output, process or control device. • Correct connections, short circuits. Electrical components and their accepted symbols. • Drawing electrical circuits using accepted symbols (as in Grade 12 see Addendum C). • Set up circuits using a range of components. Draw the circuits using symbols. • Practical: learners draw circuit diagrams AND connect circuits showing the effect of circuits with resistors connected in series and parallel. • Electrochemical cells. • Practical: make your own batteries – fruit, vegetable and salt water batteries. • Advantages and disadvantages of series and parallel batteries.	• Action Research: testing Ohm's Law practically – measure the voltage (potential difference) and the current strength in each of the following circuits: • One cell connected to a 20W resistor – note the voltmeter and ammeter readings. • Two cells connected to the 20W resistor – note the voltmeter and ammeter readings. • Three cells connected to the 20W resistor – note the voltmeter and ammeter readings • Plot the readings on a graph and determine the relationship between potential difference and current strength while keeping the resistance constant. • Resistor Colour Codes: • Low value resistors often have their resistance value printed on them in numbers. • Higher value resistors are coded using coloured bands. The first three bands give the value

	Subject: Technology		Grades 7 - 9
	REVISED CONTENT MAP PER PHASE		
KEY TOPIC	GRADE 7	GRADE 8	GRADE 9
			of the resistor in ohms. The fourth band is an accuracy rating as a percentage. **Calculate values**: $R = \frac{V}{I}$ use to calculate R if V and I are known. $V = IR$ use to calculate V if I and R are known. $I = \frac{V}{R}$ use to calculate I if V and R are known.
ELECTRICAL SYSTEMS AND CONTROL / ELECTRONICS		• Photovoltaic cells - advantages and disadvantages of solar cells. • Investigation: AND logic gate and simple cases where it is used. • Investigation: OR logic gate and simple cases where it is used. • Lesson: truth tables for AND & OR logic conditions.	Note: R - *represents the resistance of a resistor in ohms* .... [Ω]. V - *represents the potential difference in volts* ..... [V]. I - *represents the current strength in amperes* ..... [A]. • Switches: Manual switches controlled by the user, e.g. push, SPST, SPDT, DPDT. • Diodes and led (light emitting diode): - A diode is a component that allows current to flow in one direction only. - A LED allows current to flow in one direction only and also gives off light and is often used as an indicator that a circuit is 'ON'. • Transistors: only npn-type will be used at this level. - A transistor is a device that can act as a *switch* and it can *amplify* a small current (e.g. from a sensor) into a larger current. - Connect a simple transistor circuit. Sensors – important input devices: • LDR (light dependent resistor) – a component whose resistance decreases with light [dark – high resistance; bright light – low resistance].
			• Thermistor: a component whose resistance varies with temperature. Two types exist: - + t: resistance *increases* with increasing temperature. - - t: resistance *decreases* with increasing temperature. • Touch Or Moisture Detector: a component that can be bridged using a 'wet' finger, thus completing the circuit, indicating the touch. • Capacitors: a component which can store and then release electrical energy. • Simple Electronic Circuits: Learners draw, AND work in groups to assemble these simple electronic circuits:

	Subject: Technology		Grades 7 - 9
	REVISED CONTENT MAP PER PHASE		
KEY TOPIC	GRADE 7	GRADE 8	GRADE 9
			-LED, 470Ω resistor, switch, and 4,5V series battery. -LDR, buzzer, 3V series battery. -NPN transistor, buzzer or bell, thermistor, variable resistor, 1kΩ resistor, 6V series battery (or DC power supply or photovoltaic panel). -6V series battery, LED, 470Ω resistor, 1 000µF capacitor, switch. Task: identify a problem that can be solved by an electronic circuit. Assemble a given electronic circuit and design a device which can utilise the circuit to solve the problem,
MECHANICAL SYSTEMS AND CONTROL	• Introductory lesson: All complex machinery consists of combinations of simple mechanisms. Machines can be designed to give the user a "mechanical advantage". Levers were looked at in term 1. • Introduce learners to cranks and pulleys. -The crank – an adaptation of a second-class lever. -The pulley – a type of wheel and axle. • Revision: a) What is mechanical advantage? b) Strengthening frame structures • Learners must use their knowledge of structures and the drawing skills developed in earlier tasks, together with their new knowledge of magnetism, electric circuits and electromagnets as well as their knowledge of cranks and pulleys to design and make a crane using an electromagnet to sort metals in a scrapyard. • Case study: Examine pictures of cranes in order to get ideas to be used in the learner's own designs. • Write a design brief with specifications and constraints for a crane with electromagnet.	• Gear systems – concepts (counter rotation, idler, velocity ratio, force multiplication). - Two spur gears of unequal size – note counter rotation and velocity ratio. - Two spur gears of unequal size – note velocity ratio and force ratio (mechanical advantage < or > 1). - Two spur gears connected via an idler – note synchronised rotational direction. - Suitable materials – the idler needs to be of a harder material than the other gears. - Two bevel gears linked to transfer the axis of rotation through 90º. • *Calculate* mechanical advantage (MA) • Levers: mechanical advantage calculations for levers using ratios. • Calculations using LOAD/EFFORT; load ARM/effort ARM; etc. • *Do NOT use the method of "taking moments about a point".* • Gears: mechanical advantage calculations for gears using ratios Calculations using tooth ratios; gear wheel diameters; velocity ratios	• Learners experiment with two different sizes of syringes linked by a tube and filled with hydraulic fluid (water). Learners experience force transfer with either force multiplication or force division (depending on which syringe is the driver/master). Gases (like air) are compressible. Liquids (like water, oils) are incompressible. • Pascal's principle – pressure exerted on one part of a hydraulic system will be transferred equally without any loss in all directions to other parts of the system. • Note that equal volumes of liquid are moved through the systems, and this results in different extensions (amount of movement) where syringes (cylinders) are of different sizes, so less distance/more force (MA > 1); and more distance/less force (MA < 1). • THE HYDRAULIC PRESS (including simple calculations). • The hydraulic jack. • Draw a systems diagram which describes the way a hydraulic jack works. • ACTION RESEARCH: practical investigations: - Use a single wheel fixed pulley to change the direction of pull (MA = 0).
MECHANICAL SYSTEMS AND CONTROL	•Sketch two possible designs for a suitable crane using single VP perspective. •Draw a circuit diagram for the electromagnet (with a light to show when it is on). Revision: Revise the 3D oblique drawing technique; line types; scale; dimensions. •Drawing: Each learner uses the Oblique technique to draw an idea for the crane chosen from the two ideas sketched the previous week. The idea should be drawn on squared paper (quadrant) using pencil and ruler. • •Flow chart: Each learner works out a flow chart detailing the	• Represent gear systems graphically: use circular templates and/or pair of compasses to draw gear systems with: - The driven gear rotating in the *opposite* direction to the driver (counter rotation). - The driven gear rotating in the *same* direction to the driver (include an idler gear). - The driven gear rotating *faster* than the driver (with and without an idler). - The driven gear rotating *slower* than the driver (with and without an idler).	- Use a single wheel moveable pulley to change the direction of pull (MA > 0). - Use a pulley block system (block and tackle) to determine the relationship between loadbearing ropes on moveable pulley wheels and M.A (force multiplication). •INVESTIGATE: learners find out about the following mechanical control systems: - Ratchet and pawl. - Disc brake. - Bicycle brake. - Cleat.

	Subject: Technology	Grades 7 - 9	
	REVISED CONTENT MAP PER PHASE		
KEY TOPIC	GRADE 7	GRADE 8	GRADE 9
	sequence of manufacture of the crane with its electromagnet	• Design brief: learners write a design brief with specifications for a device that will use a combination of gears to achieve: • A mechanical advantage with force multiplication of three times. An increase in output velocity of four times. • Learners working in teams investigate and report on one of the following: *Distribute the investigations so all are covered and reported in each class.* • Investigate: The impact on the environment as a result of mining of: Acid mine drainage..... OR	• Lead learners as they find out about the interactions of the following: - Bevel gears of equal size – axis of rotation 90˚. - Bevel gears of unequal size – axis of rotation 90˚ – Note velocity/force relationships. - Rack-and-pinion gear system as found on automatic gates and steering racks. - Worm gear system for large reduction in speed and increase in force. • EVALUATE: learners examine various items using mechanisms found in the modern kitchen and/or home, workshop/garage.
MECHANICAL SYSTEMS AND CONTROL		• Investigate: The impact on the environment as a result of mining of: • Dust pollution from mine dumps on residential areas. ..... OR • investigate: Iron age technology: • Indigenous mining of iron in South Africa before the modern era..... OR • investigate: Bias in technology: • Gender bias in career choice / opportunities related to mining. • Drawings for the shaft head-gear – each learner draws a: • 3D isometric drawing of the selected design giving dimensions and drawn to scale. • 2D working drawing showing one or more views with dimensions and lines. • Budget: teams prepare a realistic budget detailing expected costs of constructing a real mine shaft headgear, detailing valid prices of materials and labour costs of the range of workers who would be involved in designing and building such a device.	• Items like can openers, egg beaters, 'strap' spanners for opening bottles, knives for a range of purposes, and vice grip, wire strippers and ratchet spanners should be evaluated in terms of: • Who is it for? • What is it for? • Will it do the job? • What material is it made of? • Is the material suitable? • What should it cost? • Does it look good? • Is it safe and easy to use? • They report on three items. ARTISTIC DRAWING: single vanishing point perspective. - Learners draw a 3D wooden object using single VP perspective. They enhance the drawing showing the texture of the wood grain, colour and shadows - Learners use single VP perspective to draw an inside view of the classroom.
PROCESSING	• Learners investigate emergency situations that can lead to refugees: - Find out what situations commonly result in people becoming refugees. - Find out what initial problems are typically faced by refugees. ✓ What mix of people will usually be present? ✓ What are their needs for shelter? (Shelter will be addressed in the PAT) ✓ What are their needs for food and water? • Processing food: emergency food investigate the types of food that can be supplied to occupants of a refugee camp. • Design brief: learners write a design brief giving specifications of	• The positive impact of technology: many natural materials have been replaced in modern times by new or improved materials. Some new materials are environmentally friendly by being bio-degradable. • Case study 1: investigate the impact of plastic shopping bags on the environment. • Report: learners write a report evaluating the effectiveness of using thicker, bio-degradable plastic shopping bags which shoppers must buy. • Case study 2: technology with a positive impact on society. - Investigate how waste paper and cardboard are recycled to produce new products for the packaging industry. • Development: draw a development of an opened container. Case	PRESERVING METALS (painting, galvanizing - theoretically, Electroplating – demonstration/video) 1.1. Painting 1.2. Galvanising 1.3. Electroplating • PRESERVING FOOD (storing grain & storing grain - theoretically, Drying and/or salting – demonstration/video) 2.1. Storing grain 2.2. Pickling 2.3. Drying and/or salting • TYPES OF PLASTICS AND THEIR USES • INVESTIGATION: identification of plastic identifying - codes and sorting for recycling. • PROPERTIES OF PLASTICS Reduce – reuse – recycle

	Subject: Technology		Grades 7 - 9
	REVISED CONTENT MAP PER PHASE		
KEY TOPIC	GRADE 7	GRADE 8	GRADE 9
	the types and quantities of food needed for a population of 100 refugees. • Design: List the ingredients of a meal that will be nutritious as well as tasty, and which can be prepared under conditions likely to be found in a refugee camp. • Write down the sequence of manufacture for the process of preparing one item from the meal described above. • Learners prepare the item selected above. • Learners evaluate the item in terms of flavour, texture and nutritional value.	study 3: technological products can have a negative impact. • Investigate a technological product that can have a negative impact on society. • Class discussion: facilitate a class discussion on possible solutions that can counteract or compensate for the negative impact of the technology identified.	• CASE STUDY: Remanufacturing waste plastic into pellets for re-use.**Systems diagram: Draw a systems diagram describing a plastics recycling project. **CASE STUDY: Moulding recycled plastic pellets into products.
	• Learners investigate clothing worn by people in specialised occupations like the emergency services, e.g. fire department, NSRI or dangerous professions. Learners must investigate the following: • Find out what textiles are used to make the clothing worn by fire fighters, or • Find out what textiles are used to make the clothing worn by members of the NSRI • Scenario: Tragic shack fires or natural disasters like floods or earthquakes or political strife may create the need for emergency shelters to be erected for the victims. Learners design and make a simple emergency shelter for disaster victims. The shelter must be sturdy, waterproof, easy to erect and able to house a family of six for a month. Learners must be aware of the importance of health and safety issues. • Investigate: Learners investigate materials and building techniques used by indigenous people for constructing housing in rural South Africa. Materials used in such construction is typically readily available, appropriate and environmentally friendly. • Investigate: Learners compare materials and building techniques used by people setting up informal settlements.	•	**CASE STUDY: plastics used on modern motor cars. **CASE STUDY: plastics used around the home. • PROBLEM IDENTIFICATION: learners identify a need or want that can be satisfied by the making of a plastic item of their own design. • SKETCH: learners sketch their plastic item using isometric projection on grid paper. • PLAN: learners draw their plastic item using first angle orthographic projection. • SKILLS DEVELOPMENT: learners practise the skills needed to manufacture their plastic item – measure, mark out, cut, bend and join. Moulding is an optional extra • PRACTICAL SESSIONS: working safely, learners measure, mark out, cut and bend the materials for their plastic item, and then assemble the product. • Each learner compiles a record of his/her term's work including extending the lifespan of metals and food, properties and uses of various plastics, the plastics recycling strategy, the case studies, and the sketches and plans for the plastic item.
	They compare these materials to those used by indigenous builders in terms of suitability, availability and environmentally friendliness. • Investigate: Learners find out what chemicals can waterproof a textile like canvas. • Investigate: Learners find out about the burning characteristics of various textiles Design brief: Learners write an appropriate design brief with specifications for producing a textile suitable for use in making an emergency shelter. • Design: Learners sketch design ideas for an emergency shelter that can be transported to and erected at a site where people have become homeless.	•	