This diagram shows how curriculum levels typically relate to years at school. Many students do not, however, fit this pattern. They include those with special learning needs, those who are gifted, and those who come from non-English-speaking backgrounds. Students learning an additional language are also unlikely to follow the suggested progression: level 1 is the entry level for those with no prior knowledge of the language being learned, regardless of their school year.

Achievement Objectives by Level
The fold-out charts that follow group achievement objectives by level. This format facilitates cross-curricular collaborative planning and assessment. The achievement objectives are also available in a format that sets them out by levels within learning areas. In some cases, this second set of charts provides additional information.
Listening, Reading, and Viewing

Processes and strategies

Students will:

- Acquire and begin to use sources of information, processes, and strategies to identify, form, and express ideas.

INDICATORS:
- selects and reads texts for enjoyment and personal fulfilment;
- has an awareness of the connections between oral, written, and visual language;
- uses sources of information (meaning, structure, visual and grapho-phonetic information) and prior knowledge to make sense of a range of texts;
- associates sounds with letter clusters as well as with individual letters;
- uses processing and some comprehension strategies with some confidence;
- is developing the ability to think critically about texts;
- begins to monitor, self-evaluate, and describe progress.

By using these processes and strategies when listening, reading, or viewing, students will:

Purposes and audiences

- Recognise that texts are shaped for different purposes and audiences.

INDICATORS:
- identifies the purposes of simple texts;
- evaluates the usefulness of simple texts.

Ideas

- Recognise and identify ideas within and across texts.

INDICATORS:
- understands that personal experience can influence the meaning gained from texts;
- makes meaning of texts by identifying ideas in some texts.

Language features

- Recognise and begin to understand how language features are used for effect within and across texts.

INDICATORS:
- begins to recognise that oral, written, and visual language features can be used for effect;
- recognises a large bank of high-frequency and some topic-specific words;
- shows some knowledge of text conventions, such as: capital letters, full stops, and word order; volume and clarity; and simple symbols.

Structure

- Recognise and begin to understand text structures.

INDICATORS:
- understands that the order and organisation of words, sentences, and images contribute to text meaning;
- recognises some text forms and some differences between them.

Speaking, Writing, and Presenting

Processes and strategies

Students will:

- Acquire and begin to use sources of information, processes, and strategies to identify, form, and express ideas.

INDICATORS:
- has an awareness of the connections between oral, written, and visual language when creating text;
- creates texts by using meaning, structure, visual and grapho-phonetic sources of information, prior knowledge, and some processing strategies with some confidence;
- seeks feedback and makes changes to texts;
- is becoming reflective about the production of own texts;
- begins to monitor, self-evaluate, and describe progress.

By using these processes and strategies when speaking, writing, or presenting, students will:

Purposes and audiences

- Recognise how to shape texts for a purpose and an audience.

INDICATORS:
- constructs texts that demonstrate some awareness of purpose and audience through appropriate choice of content, language, and text form;
- expects the texts they create to be understood, responded to, and appreciated by others;
- is developing and conveying personal voice where appropriate.

Ideas

- Form and express ideas on a range of topics.

INDICATORS:
- forms and expresses simple ideas and information, usually drawing from personal experience and knowledge;
- begins to support ideas with some detail.

Language features

- Use language features, showing some recognition of their effects.

INDICATORS:
- uses some oral, written, and visual language features to create meaning and effect;
- uses a range of high-frequency, topic-specific, and personal-content words to create meaning;
- spells some high-frequency words correctly and begins to use some common spelling patterns;
- begins to use some strategies to self-correct and monitor spelling;
- writes most letters and number forms legibly when creating texts;
- begins to gain control of text conventions, such as: capital letters and full stops; some basic grammatical conventions; volume, clarity, and tone; and simple symbols.

Structure

- Organise texts, using simple structures.

INDICATORS:
- uses knowledge of word and sentence order to communicate meaning in simple texts;
- begins to sequence ideas and information;
- uses simple sentences with some variation in beginnings;
- may attempt compound and complex sentences.
<table>
<thead>
<tr>
<th><strong>Level One</strong></th>
<th><strong>The Arts</strong></th>
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<tbody>
<tr>
<td><strong>Understanding the Arts in Context</strong></td>
<td><strong>Developing Practical Knowledge</strong></td>
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<tr>
<td><strong>Dance</strong> Students will:</td>
<td></td>
</tr>
<tr>
<td>• Demonstrate an awareness of dance in their lives and in their communities.</td>
<td>• Explore movement with a developing awareness of the dance elements of body, space, time, energy, and relationships.</td>
</tr>
<tr>
<td><strong>Drama</strong> Students will:</td>
<td></td>
</tr>
<tr>
<td>• Demonstrate an awareness that drama serves a variety of purposes in their lives and in their communities.</td>
<td>• Explore the elements of role, focus, action, tension, time, and space through dramatic play.</td>
</tr>
<tr>
<td><strong>Music – Sound Arts</strong> Students will:</td>
<td></td>
</tr>
<tr>
<td>• Explore and share ideas about music from a range of sound environments and recognise that music serves a variety of purposes and functions in their lives and in their communities.</td>
<td>• Explore how sound is made, as they listen and respond to the elements of music: beat, rhythm, pitch, tempo, dynamics, and tone colour.</td>
</tr>
<tr>
<td></td>
<td>• Explore ways to represent sound and musical ideas.</td>
</tr>
<tr>
<td><strong>Visual Arts</strong> Students will:</td>
<td></td>
</tr>
<tr>
<td>• Share ideas about how and why their own and others’ works are made and their purpose, value, and context.</td>
<td>• Explore a variety of materials and tools and discover elements and selected principles.</td>
</tr>
</tbody>
</table>
Level One Health and Physical Education

Personal Health and Physical Development
Students will:

Personal growth and development
- Describe feelings and ask questions about their health, growth, development, and personal needs and wants.

Regular physical activity
- Participate in creative and regular physical activities and identify enjoyable experiences.

Safety management
- Describe and use safe practices in a range of contexts and identify people who can help.

Personal identity
- Describe themselves in relation to a range of contexts.

Movement Concepts and Motor Skills
Students will:

Movement skills; Science and technology
- Develop a wide range of movement skills, using a variety of equipment and play environments.

Positive attitudes; Challenges and social and cultural factors
- Participate in a range of games and activities and identify the factors that make participation safe and enjoyable.

Relationships with Other People
Students will:

Relationships
- Explore and share ideas about relationships with other people.

Identity, sensitivity, and respect
- Demonstrate respect through sharing and co-operation in groups.

Interpersonal skills
- Express their own ideas, needs, wants, and feelings clearly and listen to those of other people.

Healthy Communities and Environments
Students will:

Community resources
- Identify and discuss obvious hazards in their home, school, and local environment and adopt simple safety practices.

Rights, responsibilities, and laws; People and the environment
- Take individual and collective action to contribute to environments that can be enjoyed by all.

Key Competencies

- Thinking
- Using language, symbols, and texts
- Managing self
- Relating to others
- Participating and contributing
In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:

### Number and Algebra

**Number strategies**
- Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions.

**Number knowledge**
- Know the forward and backward counting sequences of whole numbers to 100.
- Know groupings with five, within ten, and with ten.

**Equations and expressions**
- Communicate and explain counting, grouping, and equal-sharing strategies, using words, numbers, and pictures.

**Patterns and relationships**
- Generalise that the next counting number gives the result of adding one object to a set and that counting the number of objects in a set tells how many.
- Create and continue sequential patterns.

### Geometry and Measurement

**Measurement**
- Order and compare objects or events by length, area, volume and capacity, weight (mass), turn (angle), temperature, and time by direct comparison and/or counting whole numbers of units.

**Shape**
- Sort objects by their appearance.

**Position and orientation**
- Give and follow instructions for movement that involve distances, directions, and half or quarter turns.
- Describe their position relative to a person or object.

**Transformation**
- Communicate and record the results of translations, reflections, and rotations on plane shapes.

### Statistics

**Statistical investigation**
- Conduct investigations using the statistical enquiry cycle:
  - posing and answering questions;
  - gathering, sorting and counting, and displaying category data;
  - discussing the results.

**Statistical literacy**
- Interpret statements made by others from statistical investigations and probability activities.

**Probability**
- Investigate situations that involve elements of chance, acknowledging and anticipating possible outcomes.
## Levels One and Two Science

### Nature of Science

**Students will:**

**Understanding about science**
- Appreciate that scientists ask questions about our world that lead to investigations and that open-mindedness is important because there may be more than one explanation.

**Investigating in science**
- Extend their experiences and personal explanations of the natural world through exploration, play, asking questions, and discussing simple models.

**Communicating in science**
- Build their language and develop their understandings of the many ways the natural world can be represented.

**Participating and contributing**
- Explore and act on issues and questions that link their science learning to their daily living.

### Living World

**Students will:**

**Life processes**
- Recognise that all living things have certain requirements so they can stay alive.

**Ecology**
- Recognise that living things are suited to their particular habitat.

**Evolution**
- Recognise that there are lots of different living things in the world and that they can be grouped in different ways.
- Explain how we know that some living things from the past are now extinct.

### Planet Earth and Beyond

**Students will:**

**Earth systems**
- Explore and describe natural features and resources.

**Interacting systems**
- Describe how natural features are changed and resources affected by natural events and human actions.

**Astronomical systems**
- Share ideas and observations about the Sun and the Moon and their physical effects on the heat and light available to Earth.

### Physical World

**Students will:**

**Physical inquiry and physics concepts**
- Explore everyday examples of physical phenomena, such as movement, forces, electricity and magnetism, light, sound, waves, and heat.
- Seek and describe simple patterns in physical phenomena.

### Material World

**Students will:**

**Properties and changes of matter**
- Observe, describe, and compare physical and chemical properties of common materials and changes that occur when materials are mixed, heated, or cooled.

**Chemistry and society**
- Find out about the uses of common materials and relate these to their observed properties.
Social Sciences

Students will gain knowledge, skills, and experience to:

- Understand how belonging to groups is important for people.
- Understand that people have different roles and responsibilities as part of their participation in groups.
- Understand how the past is important to people.
- Understand how places in New Zealand are significant for individuals and groups.
- Understand how the cultures of people in New Zealand are expressed in their daily lives.

Technology

Planning for practice

- Outline a general plan to support the development of an outcome, identifying appropriate steps and resources.

Brief development

- Describe the outcome they are developing and identify the attributes it should have, taking account of the need or opportunity and the resources available.

Outcome development and evaluation

- Investigate a context to communicate potential outcomes. Evaluate these against attributes; select and develop an outcome in keeping with the identified attributes.

Technological Knowledge

Students will:

Technological modelling

- Understand that functional models are used to represent reality and test design concepts and that prototypes are used to test technological outcomes.

Technological products

- Understand that technological products are made from materials that have performance properties.

Technological systems

- Understand that technological systems have inputs, controlled transformations, and outputs.

Nature of Technology

Students will:

Characteristics of technology

- Understand that technology is purposeful intervention through design.

Characteristics of technological outcomes

- Understand that technological outcomes are products or systems developed by people and have a physical nature and a functional nature.
## Level Two English

### Listening, Reading, and Viewing

#### Processes and strategies

**Students will:**
- Select and use sources of information, processes, and strategies with some confidence to identify, form, and express ideas.

**INDICATORS:**
- selects and reads texts for enjoyment and personal fulfillment;
- recognises connections between oral, written, and visual language;
- selects and uses sources of information (meaning, structure, visual and grapho-phonemic information) and prior knowledge with growing confidence to make sense of increasingly varied and complex texts;
- uses an increasing knowledge of letter clusters, affixes, roots, and compound words to confirm predictions;
- selects and uses processing strategies and an increasing range of comprehension strategies with some understanding and confidence;
- thinks critically about texts with some confidence;
- monitors, self-evaluates, and describes progress with some confidence.

**By using these processes and strategies when listening, reading, or viewing, students will:**

#### Purposes and audiences

- Show some understanding of how texts are shaped for different purposes and audiences.

**INDICATORS:**
- recognises how texts are constructed for different purposes, audiences, and situations;
- understands that texts are created from a particular point of view;
- evaluates the reliability and usefulness of texts with some confidence.

#### Ideas

- Show some understanding of ideas within, across, and beyond texts.

**INDICATORS:**
- uses their personal experience and world and literacy knowledge to make meaning from texts;
- makes meaning of increasingly complex texts by identifying main ideas;
- makes and supports inferences from texts with some independence.

#### Language features

- Show some understanding of how language features are used for effect within and across texts.

**INDICATORS:**
- recognises that oral, written, and visual language features can be used for effect;
- uses a large and increasing bank of high-frequency, topic-specific, and personal-content words to make meaning;
- shows an increasing knowledge of the conventions of text;
- recognises that authors have different voices and styles.

#### Structure

- Show some understanding of text structures.

**INDICATORS:**
- understands that the order and organisation of words, sentences, paragraphs, and images contribute to text meaning;
- recognises an increasing range of text forms and differences between them.

### Speaking, Writing, and Presenting

#### Processes and strategies

**Students will:**
- Select and use sources of information, processes, and strategies with some confidence to identify, form, and express ideas.

**INDICATORS:**
- shows some understanding of the connections between oral, written, and visual language when creating texts;
- creates texts by using meaning, structure, visual and grapho-phonemic sources of information, and processing strategies with growing confidence;
- seeks feedback and makes changes to texts to improve clarity and meaning;
- is reflective about the production of texts: monitors, self-evaluates, and describes progress with some confidence.

**By using these processes and strategies when speaking, writing, or presenting, students will:**

#### Purposes and audiences

- Show some understanding of how to shape texts for different purposes and audiences.

**INDICATORS:**
- constructs texts that demonstrate a growing awareness of audience and purpose through appropriate choice of content, language, and text form;
- expects the texts they create to be understood, responded to, and appreciated by others;
- develops and conveys personal voice where appropriate.

#### Ideas

- Select, form, and express ideas on a range of topics.

**INDICATORS:**
- forms and expresses ideas and information with reasonable clarity, often drawing on personal experience and knowledge;
- begins to add or delete details and comments, showing some selectivity in the process.

#### Language features

- Use language features appropriately, showing some understanding of their effects.

**INDICATORS:**
- uses oral, written, and visual language features to create meaning and effect;
- uses a large and increasing bank of high-frequency, topic-specific, and personal-content words to create meaning;
- spells most high-frequency words correctly and shows growing knowledge of common spelling patterns;
- uses a range of strategies to self-monitor and self-correct spelling;
- writes legibly and with increasing fluency when creating texts;
- gains increasing control of text conventions, including some grammatical conventions.

#### Structure

- Organise texts, using a range of structures.

**INDICATORS:**
- uses knowledge of word and sentence order to communicate meaning when creating text;
- organises and sequences ideas and information with some confidence;
- begins to use a variety of sentence structures, beginnings, and lengths.
## Understanding the Arts in Context

### Dance
**Students will:**
- Identify and describe dance in their lives and in their communities.

### Developing Practical Knowledge
- Explore and identify, through movement, the dance elements of body, space, time, energy, and relationships.

### Developing Ideas
- Use the elements of dance in purposeful ways to respond to a variety of stimuli.

### Communicating and Interpreting
- Share dance movement through informal presentation and identify the use of the elements of dance.

### Drama
**Students will:**
- Identify and describe how drama serves a variety of purposes in their lives and their communities.

### Music – Sound Arts
**Students will:**
- Explore and share ideas about music from a range of sound environments and recognise that music serves a variety of purposes and functions in their lives and in their communities.

### Visual Arts
**Students will:**
- Share ideas about how and why their own and others’ works are made and their purpose, value, and context.

## Dance
**Students will:**
- Explore and identify, through movement, the dance elements of body, space, time, energy, and relationships.

## Drama
**Students will:**
- Identify and describe how drama serves a variety of purposes in their lives and their communities.

## Music – Sound Arts
**Students will:**
- Explore and identify how sound is made and changed, as they listen and respond to the elements of music and structural devices.

## Visual Arts
**Students will:**
- Share ideas about how and why their own and others’ works are made and their purpose, value, and context.
Health and Physical Education

**Level Two**

**Personal Health and Physical Development**

Students will:

- **Personal growth and development**
  - Describe their stages of growth and their development needs and demonstrate increasing responsibility for self-care.

- **Regular physical activity**
  - Experience creative, regular, and enjoyable physical activities and describe the benefits to well-being.

- **Safety management**
  - Identify risk and use safe practices in a range of contexts.

- **Personal identity**
  - Identify personal qualities that contribute to a sense of self-worth.

**Movement Concepts and Motor Skills**

Students will:

- **Movement skills**
  - Practise movement skills and demonstrate the ability to link them in order to perform movement sequences.

- **Positive attitudes**
  - Participate in and create a variety of games and activities and discuss the enjoyment that these activities can bring to them and others.

- **Science and technology**
  - Use modified equipment in a range of contexts and identify how this enhances movement experiences.

- **Challenges and social and cultural factors**
  - Develop and apply rules and practices in games and activities to promote fair, safe, and culturally appropriate participation for all.

**Relationships with Other People**

Students will:

- **Relationships**
  - Identify and demonstrate ways of maintaining and enhancing relationships between individuals and within groups.

- **Identity, sensitivity, and respect**
  - Describe how individuals and groups share characteristics and are also unique.

- **Interpersonal skills**
  - Express their ideas, needs, wants, and feelings appropriately and listen sensitively to other people and affirm them.

**Healthy Communities and Environments**

Students will:

- **Societal attitudes and values**
  - Explore how people’s attitudes, values, and actions contribute to healthy physical and social environments.

- **Community resources**
  - Identify and use local community resources and explain how these contribute to a healthy community.

- **Rights, responsibilities, and laws; People and the environment**
  - Contribute to and use simple guidelines and practices that promote physically and socially healthy classrooms, schools, and local environments.

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**Key Competencies**

- **Thinking**
  - Relating to others
- **Using language, symbols, and texts**
  - Participating and contributing
- **Managing self**
# Mathematics and Statistics

**Level Two**

In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:

## Number and Algebra

### Number strategies
- Use simple additive strategies with whole numbers and fractions.

### Number knowledge
- Know forward and backward counting sequences with whole numbers to at least 1000.
- Know the basic addition and subtraction facts.
- Know how many ones, tens, and hundreds are in whole numbers to at least 1000.
- Know simple fractions in everyday use.

## Geometry and Measurement

### Measurement
- Create and use appropriate units and devices to measure length, area, volume and capacity, weight (mass), turn (angle), temperature, and time.
- Partition and/or combine like measures and communicate them, using numbers and units.

### Shape
- Sort objects by their spatial features, with justification.
- Identify and describe the plane shapes found in objects.

### Position and orientation
- Create and use simple maps to show position and direction.
- Describe different views and pathways from locations on a map.

### Transformation
- Predict and communicate the results of translations, reflections, and rotations on plane shapes.

## Statistics

### Statistical investigation
- Conduct investigations using the statistical enquiry cycle:
  - posing and answering questions;
  - gathering, sorting, and displaying category and whole-number data;
  - communicating findings based on the data.

### Statistical literacy
- Compare statements with the features of simple data displays from statistical investigations or probability activities undertaken by others.

### Probability
- Investigate simple situations that involve elements of chance, recognising equal and different likelihoods and acknowledging uncertainty.

## See separate chart

**Learning Languages**

- See separate chart
Nature of Science

Students will:

Understanding about science
• Appreciate that scientists ask questions about our world that lead to investigations and that open-mindedness is important because there may be more than one explanation.

Investigating in science
• Extend their experiences and personal explanations of the natural world through exploration, play, asking questions, and discussing simple models.

Communicating in science
• Build their language and develop their understandings of the many ways the natural world can be represented.

Participating and contributing
• Explore and act on issues and questions that link their science learning to their daily living.

Living World

Students will:

Life processes
• Recognise that all living things have certain requirements so they can stay alive.

Ecology
• Recognise that living things are suited to their particular habitat.

Evolution
• Recognise that there are lots of different living things in the world and that they can be grouped in different ways.
• Explain how we know that some living things from the past are now extinct.

Planet Earth and Beyond

Students will:

Earth systems
• Explore and describe natural features and resources.

Interacting systems
• Describe how natural features are changed and resources affected by natural events and human actions.

Astronomical systems
• Share ideas and observations about the Sun and the Moon and their physical effects on the heat and light available to Earth.

Physical World

Students will:

Physical inquiry and physics concepts
• Explore everyday examples of physical phenomena, such as movement, forces, electricity and magnetism, light, sound, waves, and heat.
• Seek and describe simple patterns in physical phenomena.

Material World

Students will:

Properties and changes of matter
• Observe, describe, and compare physical and chemical properties of common materials and changes that occur when materials are mixed, heated, or cooled.

Chemistry and society
• Find out about the uses of common materials and relate these to their observed properties.
### Level Two Social Sciences

**Social Studies**

*Students will gain knowledge, skills, and experience to:*

- Understand that people have social, cultural, and economic roles, rights, and responsibilities.
- Understand how people make choices to meet their needs and wants.
- Understand how cultural practices reflect and express people’s customs, traditions, and values.
- Understand how time and change affect people’s lives.
- Understand how places influence people and people influence places.
- Understand how people make significant contributions to New Zealand’s society.
- Understand how the status of Māori as tangata whenua is significant for communities in New Zealand.

### Level Two Technology

**Technological Practice**

*Students will:*

**Planning for practice**
- Develop a plan that identifies the key stages and the resources required to complete an outcome.

**Brief development**
- Explain the outcome they are developing and describe the attributes it should have, taking account of the need or opportunity and the resources available.

**Outcome development and evaluation**
- Investigate a context to develop ideas for potential outcomes. Evaluate these against the identified attributes; select and develop an outcome. Evaluate the outcome in terms of the need or opportunity.

**Technological Knowledge**

*Students will:*

**Technological modelling**
- Understand that functional models are used to explore, test, and evaluate design concepts for potential outcomes and that prototyping is used to test a technological outcome for fitness of purpose.

**Technological products**
- Understand that there is a relationship between a material used and its performance properties in a technological product.

**Technological systems**
- Understand that there are relationships between the inputs, controlled transformations, and outputs occurring within simple technological systems.

**Nature of Technology**

*Students will:*

**Characteristics of technology**
- Understand that technology both reflects and changes society and the environment and increases people’s capability.

**Characteristics of technological outcomes**
- Understand that technological outcomes are developed through technological practice and have related physical and functional natures.
**Level Three English**

**Listening, Reading, and Viewing**

**Processes and strategies**

**Students will:**
- Integrate sources of information, processes, and strategies with developing confidence to identify, form, and express ideas.

**INDICATORS:**
- Selects and reads texts for enjoyment and personal fulfilment;
- Recognises and understands the connections between oral, written, and visual language;
- Integrates sources of information and prior knowledge with developing confidence to make sense of increasingly varied and complex texts;
- Selects and uses a range of processing and comprehension strategies with growing understanding and confidence;
- Thinks critically about texts with developing confidence;
- Monitors, self-evaluates, and describes progress with growing confidence.

**By using these processes and strategies when listening, reading, or viewing, students will:**

**Purpose and audiences**
- Show a developing understanding of how texts are shaped for different purposes and audiences.

**INDICATORS:**
- Recognises and understands how texts are constructed for a range of purposes, audiences, and situations;
- Identifies particular points of view and begins to recognise that texts can position a reader;
- Evaluates the reliability and usefulness of texts with increasing confidence.

**Ideas**
- Show a developing understanding of ideas within, across, and beyond texts.

**INDICATORS:**
- Uses their personal experience and world and literacy knowledge confidently to make meaning from texts;
- Makes meaning of increasingly complex texts by identifying main and subsidiary ideas in them;
- Starts to make connections by thinking about underlying ideas in and between texts;
- Recognises that there may be more than one reading available within a text;
- Makes and supports inferences from texts with increasing independence.

**Language features**
- Show a developing understanding of how language features are used for effect within and across texts.

**INDICATORS:**
- Identifies oral, written, and visual language features used in texts and recognises their effects;
- Uses an increasing vocabulary to make meaning;
- Shows an increasing knowledge of how a range of text conventions can be used appropriately;
- Knows that authors have different voices and styles and can identify some of these differences.

**Structure**
- Show a developing understanding of text structures.

**INDICATORS:**
- Understands that the order and organisation of words, sentences, paragraphs, and images contribute to and affect text meaning;
- Identifies a range of text forms and recognises some of their characteristics and conventions.

**Speaking, Writing, and Presenting**

**Processes and strategies**

**Students will:**
- Integrate sources of information, processes, and strategies with developing confidence to identify, form, and express ideas.

**INDICATORS:**
- Uses a developing understanding of the connections between oral, written, and visual language when creating texts;
- Creates a range of texts by integrating sources of information and processing strategies with developing confidence;
- Seeks feedback and makes changes to texts to improve clarity, meaning, and effect;
- Is reflective about the production of own texts: monitors and self-evaluates progress, articulating learning with growing confidence.

**By using these processes and strategies when speaking, writing, or presenting, students will:**

**Purpose and audiences**
- Show a developing understanding of how to shape texts for different purposes and audiences.

**INDICATORS:**
- Constructs texts that show a growing awareness of purpose and audience through careful choice of content, language, and text form;
- Conveys and sustains personal voice where appropriate.

**Ideas**
- Select, form, and communicate ideas on a range of topics.

**INDICATORS:**
- Forms and expresses ideas and information with increased clarity, drawing on a range of sources;
- Adds or changes details and comments to support ideas, showing some selectivity in the process;
- Ideas suggest awareness of a range of dimensions or viewpoints.

**Language features**
- Use language features appropriately, showing a developing understanding of their effects.

**INDICATORS:**
- Uses oral, written, and visual language features to create meaning and effect and engage interest;
- Uses a range of vocabulary to communicate meaning;
- Demonstrates good understanding of all basic spelling patterns and sounds in written English;
- Uses an increasing range of strategies to self-monitor and self-correct spelling;
- Writes legibly, fluently, and with ease when creating texts;
- Uses a range of text conventions, including most grammatical conventions, appropriately and with increasing accuracy.

**Structure**
- Organise texts, using a range of appropriate structures.

**INDICATORS:**
- Orgainses written ideas into paragraphs with increasing confidence;
- Organises and sequences ideas and information with increasing confidence;
- Uses a variety of sentence structures, beginnings, and lengths.
### Level Three: The Arts

#### Understanding the Arts in Context

**Dance**

_Students will:_
- Explore and describe dances from a variety of cultures.

**Drama**

_Students will:_
- Investigate the functions and purposes of drama in cultural and historical contexts.
- Use techniques and relevant technologies to explore drama elements and conventions.

**Music – Sound Arts**

_Students will:_
- Identify and describe the characteristics of music associated with a range of sound environments, in relation to historical, social, and cultural contexts.
- Explore ideas about how music serves a variety of purposes and functions in their lives and in their communities.

**Visual Arts**

_Students will:_
- Investigate the purpose of objects and images from past and present cultures and identify the contexts in which they were or are made, viewed, and valued.

#### Developing Practical Knowledge

**Dance**

- Use the dance elements to develop and share their personal movement vocabulary.

**Drama**

- Use techniques and relevant technologies to explore drama elements and conventions.

**Music – Sound Arts**

- Explore and identify how sound is made and changed, as they listen and respond to music and apply knowledge of the elements of music, structural devices, and technologies.

**Visual Arts**

- Explore some art-making conventions, applying knowledge of elements and selected principles through the use of materials and processes.

#### Developing Ideas

**Dance**

- Select and combine dance elements in response to a variety of stimuli.

**Drama**

- Initiate and develop ideas with others to create drama.

**Music – Sound Arts**

- Express and shape musical ideas, using musical elements, instruments, and technologies in response to sources of motivation.

**Visual Arts**

- Develop and revisit visual ideas, in response to a variety of motivations, observation, and imagination, supported by the study of artists’ works.

#### Communicating and Interpreting

**Dance**

- Prepare and share dance movement individually and in pairs or groups.
- Use the elements of dance to describe dance movements and respond to dances from a variety of cultures.

**Drama**

- Present and respond to drama, identifying ways in which elements, techniques, conventions, and technologies combine to create meaning in their own and others’ work.

**Music – Sound Arts**

- Prepare and present brief performances of music, using performance skills and techniques.
- Respond to and reflect on live and recorded music.

**Visual Arts**

- Describe the ideas their own and others’ objects and images communicate.
Level Three  

Health and Physical Education

Personal Health and Physical Development

Students will:

Personal growth and development
- Identify factors that affect personal, physical, social, and emotional growth and develop skills to manage changes.

Regular physical activity
- Maintain regular participation in enjoyable physical activities in a range of environments and describe how these assist in the promotion of well-being.

Safety management
- Identify risks and their causes and describe safe practices to manage these.

Personal identity
- Describe how their own feelings, beliefs, and actions, and those of other people, contribute to their personal sense of self-worth.

Movement Concepts and Motor Skills

Students will:

Movement skills
- Develop more complex movement sequences and strategies in a range of situations.

Positive attitudes
- Develop movement skills in challenging situations and describe how these challenges impact on themselves and others.

Science and technology
- Participate in and describe how their body responds to regular and vigorous physical activity in a range of environments.

Challenges and social and cultural factors
- Participate in co-operative and competitive activities and describe how co-operation and competition can affect people’s behaviour and the quality of the experience.

Relationships with Other People

Students will:

Relationships
- Identify and compare ways of establishing relationships and managing changing relationships.

Identity, sensitivity, and respect
- Identify ways in which people discriminate and ways to act responsibly to support themselves and other people.

Interpersonal skills
- Identify the pressures that can influence interactions with other people and demonstrate basic assertiveness strategies to manage these.

Healthy Communities and Environments

Students will:

Societal attitudes and values
- Identify how health care and physical activity practices are influenced by community and environmental factors.

Community resources
- Participate in communal events and describe how such events enhance the well-being of the community.

Rights, responsibilities, and laws
- Research and describe current health and safety guidelines and practices in their school and take action to enhance their effectiveness.

People and the environment
- Plan and implement a programme to enhance an identified social or physical aspect of their classroom or school environment.

Key Competencies

- **Thinking**
- **Using language, symbols, and texts**
- **Relating to others**
- **Participating and contributing**
- **Managing self**
In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:

**Mathematics and Statistics**

<table>
<thead>
<tr>
<th><strong>Number and Algebra</strong></th>
<th><strong>Geometry and Measurement</strong></th>
<th><strong>Statistics</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number strategies</strong></td>
<td><strong>Measurement</strong></td>
<td><strong>Statistical investigation</strong></td>
</tr>
<tr>
<td>Use a range of additive and simple multiplicative strategies with whole numbers, fractions, decimals, and percentages.</td>
<td>Use linear scales and whole numbers of metric units for length, area, volume and capacity, weight (mass), angle, temperature, and time.</td>
<td>Conduct investigations using the statistical enquiry cycle:</td>
</tr>
<tr>
<td><strong>Number knowledge</strong></td>
<td></td>
<td>- gathering, sorting, and displaying multivariate category and whole-number data and simple time-series data to answer questions;</td>
</tr>
<tr>
<td>Know basic multiplication and division facts.</td>
<td>Find areas of rectangles and volumes of cuboids by applying multiplication.</td>
<td>- identifying patterns and trends in context, within and between data sets;</td>
</tr>
<tr>
<td>Know counting sequences for whole numbers.</td>
<td><strong>Shape</strong></td>
<td>- communicating findings, using data displays.</td>
</tr>
<tr>
<td>Know how many tenths, tens, hundreds, and thousands are in whole numbers.</td>
<td>Classify plane shapes and prisms by their spatial features.</td>
<td><strong>Statistical literacy</strong></td>
</tr>
<tr>
<td>Know fractions and percentages in everyday use.</td>
<td>Represent objects with drawings and models.</td>
<td>Evaluate the effectiveness of different displays in representing the findings of a statistical investigation or probability activity undertaken by others.</td>
</tr>
<tr>
<td><strong>Equations and expressions</strong></td>
<td><strong>Position and orientation</strong></td>
<td><strong>Probability</strong></td>
</tr>
<tr>
<td>Record and interpret additive and simple multiplicative strategies, using words, diagrams, and symbols, with an understanding of equality.</td>
<td>Use a co-ordinate system or the language of direction and distance to specify locations and describe paths.</td>
<td>Investigate simple situations that involve elements of chance by comparing experimental results with expectations from models of all the outcomes, acknowledging that samples vary.</td>
</tr>
<tr>
<td><strong>Patterns and relationships</strong></td>
<td><strong>Transformation</strong></td>
<td></td>
</tr>
<tr>
<td>Generalise the properties of addition and subtraction with whole numbers.</td>
<td>Describe the transformations (reflection, rotation, translation, or enlargement) that have mapped one object onto another.</td>
<td></td>
</tr>
<tr>
<td>Connect members of sequential patterns with their ordinal position and use tables, graphs, and diagrams to find relationships between successive elements of number and spatial patterns.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**See separate chart Learning Languages**
# Level Three Science

## Nature of Science

**Students will:**

### Understanding about science
- Appreciate that science is a way of explaining the world and that science knowledge changes over time.
- Identify ways in which scientists work together and provide evidence to support their ideas.

### Investigating in science
- Build on prior experiences, working together to share and examine their own and others’ knowledge.
- Ask questions, find evidence, explore simple models, and carry out appropriate investigations to develop simple explanations.

### Communicating in science
- Begin to use a range of scientific symbols, conventions, and vocabulary.
- Engage with a range of science texts and begin to question the purposes for which these texts are constructed.

### Participating and contributing
- Use their growing science knowledge when considering issues of concern to them.
- Explore various aspects of an issue and make decisions about possible actions.

## Living World

**Students will:**

### Life processes
- Recognise that there are life processes common to all living things and that these occur in different ways.

### Ecology
- Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

### Evolution
- Begin to group plants, animals, and other living things into science-based classifications.
- Explore how the groups of living things we have in the world have changed over long periods of time and appreciate that some living things in New Zealand are quite different from living things in other areas of the world.

## Planet Earth and Beyond

**Students will:**

### Earth systems
- Appreciate that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth’s resources.

### Interacting systems
- Investigate the water cycle and its effect on climate, landforms, and life.

### Astronomical systems
- Investigate the components of the solar system, developing an appreciation of the distances between them.

## Physical World

**Students will:**

### Physical inquiry and physics concepts
- Explore, describe, and represent patterns and trends for everyday examples of physical phenomena, such as movement, forces, electricity and magnetism, light, sound, waves, and heat. For example, identify and describe the effect of forces (contact and non-contact) on the motion of objects; identify and describe everyday examples of sources of energy, forms of energy, and energy transformations.

## Material World

**Students will:**

### Properties and changes of matter
- Group materials in different ways, based on the observations and measurements of the characteristic chemical and physical properties of a range of different materials.
- Compare chemical and physical changes.

### Chemistry and society
- Relate the observed, characteristic chemical and physical properties of a range of different materials to technological uses and natural processes.
Level Three Social Sciences

Social Studies

Students will gain knowledge, skills, and experience to:

• Understand how groups make and implement rules and laws.
• Understand how cultural practices vary but reflect similar purposes.
• Understand how people view and use places differently.
• Understand how people make decisions about access to and use of resources.
• Understand how people remember and record the past in different ways.
• Understand how early Polynesian and British migrations to New Zealand have continuing significance for tangata whenua and communities.
• Understand how the movement of people affects cultural diversity and interaction in New Zealand.

Level Three Technology

Technological Practice

Students will:

Planning for practice

• Undertake planning to identify the key stages and resources required to develop an outcome. Revisit planning to include reviews of progress and identify implications for subsequent decision making.

Brief development

• Describe the nature of an intended outcome, explaining how it addresses the need or opportunity. Describe the key attributes that enable development and evaluation of an outcome.

Outcome development and evaluation

• Investigate a context to develop ideas for potential outcomes. Trial and evaluate these against key attributes to select and develop an outcome to address the need or opportunity. Evaluate this outcome against the key attributes and how it addresses the need or opportunity.

Technological Knowledge

Students will:

Technological modelling

• Understand that different forms of functional modelling are used to inform decision making in the development of technological possibilities and that prototypes can be used to evaluate the fitness of technological outcomes for further development.

Technological products

• Understand the relationship between the materials used and their performance properties in technological products.

Technological systems

• Understand that technological systems are represented by symbolic language tools and understand the role played by the “black box” in technological systems.

Nature of Technology

Students will:

Characteristics of technology

• Understand how society and environments impact on and are influenced by technology in historical and contemporary contexts and that technological knowledge is validated by successful function.

Characteristics of technological outcomes

• Understand that technological outcomes are recognisable as fit for purpose by the relationship between their physical and functional natures.
Level Four English

Listening, Reading, and Viewing

Processes and strategies

Students will:
• Integrate sources of information, processes, and strategies confidently to identify, form, and express ideas.

INDICATORS:
– selects and reads texts for enjoyment and personal fulfilment;
– recognises and understands the connections between oral, written, and visual language;
– integrates sources of information and prior knowledge confidently to make sense of increasingly varied and complex texts;
– selects and uses appropriate processing and comprehension strategies with increasing understanding and confidence;
– monitors, self-evaluates, describes progress, and articulates learning with confidence.

By using these processes and strategies when listening, reading, or viewing, students will:

Purposes and audiences
• Show an increasing understanding of how texts are shaped for different purposes and audiences.

INDICATORS:
– recognises and understands how texts are constructed for a range of purposes, audiences, and situations;
– identifies particular points of view and recognises that texts can position a reader;
– evaluates the reliability and usefulness of texts with increasing confidence.

Ideas
• Show an increasing understanding of ideas within, across, and beyond texts.

INDICATORS:
– makes meaning of increasingly complex texts by identifying and understanding main and subsidiary ideas and the links between them;
– makes connections by thinking about underlying ideas within and between texts from a range of contexts;
– recognises that there may be more than one reading available within a text;
– makes and supports inferences from texts with increasing independence.

Language features
• Show an increasing understanding of how language features are used for effect within and across texts.

INDICATORS:
– identifies oral, written, and visual features used and recognises and describes their effects;
– uses an increasing vocabulary to make meaning;
– shows an increasing knowledge of how a range of text conventions can be used appropriately and effectively;
– knows that authors have different voices and styles and can identify and describe some of these differences.

Structure
• Show an increasing understanding of text structures.

INDICATORS:
– understands that the order and organisation of words, sentences, paragraphs, and images contribute to and affect meaning in a range of texts;
– identifies an increasing range of text forms and recognises and describes their characteristics and conventions.

Speaking, Writing, and Presenting

Processes and strategies

Students will:
• Integrate sources of information, processes, and strategies confidently to identify, form, and express ideas.

INDICATORS:
– uses an increasing understanding of the connections between oral, written, and visual language when creating texts;
– creates a range of texts by integrating sources of information and processing strategies with increasing confidence;
– seeks feedback and makes changes to texts to improve clarity, meaning, and effect;
– is reflective about the production of own texts: monitors and self-evaluates progress, articulating learning with confidence.

By using these processes and strategies when speaking, writing, or presenting, students will:

Purposes and audiences
• Show an increasing understanding of how to shape texts for different purposes and audiences.

INDICATORS:
– constructs texts that show an awareness of purpose and audience through deliberate choice of content, language, and text form;
– conveys and sustains personal voice where appropriate.

Ideas
• Select, develop, and communicate ideas on a range of topics.

INDICATORS:
– forms and communicates ideas and information clearly, drawing on a range of sources;
– adds or changes details and comments to support ideas, showing thoughtful selection in the process;
– ideas show increasing awareness of a range of dimensions or viewpoints.

Language features
• Use a range of language features appropriately, showing an increasing understanding of their effects.

INDICATORS:
– uses a range of oral, written, and visual features to create meaning and effect and to sustain interest;
– uses a range of vocabulary to communicate precise meaning;
– demonstrates a good understanding of spelling patterns in written English, with few intrusive errors;
– uses a wide range of strategies to self-monitor and self-correct spelling;
– writes with increasing speed and endurance to suit the nature of the task and its purpose, without significant loss of legibility;
– uses a range of text conventions, including grammatical conventions, appropriately, effectively, and with increasing accuracy.

Structure
• Organise texts, using a range of appropriate structures.

INDICATORS:
– achieves some coherence and wholeness when constructing texts;
– organises and sequences ideas and information for a particular purpose or effect;
– uses a variety of sentence structures, beginnings, and lengths for effect.
## Level Four: The Arts

### Understanding the Arts in Context

#### Dance

**Students will:**
- Explore and describe how dance is used for different purposes in a variety of cultures and contexts.

#### Drama

**Students will:**
- Investigate the functions, purposes, and technologies of drama in cultural and historical contexts.

#### Music – Sound Arts

**Students will:**
- Identify and describe the characteristics of music associated with a range of sound environments, in relation to historical, social, and cultural contexts.
- Explore ideas about how music serves a variety of purposes and functions in their lives and in their communities.

### Developing Practical Knowledge

#### Dance

**Students will:**
- Apply the dance elements to extend personal movement skills and vocabularies and to explore the vocabularies of others.

#### Drama

**Students will:**
- Select and use techniques and relevant technologies to develop drama practice.
- Use conventions to structure drama.

#### Music – Sound Arts

**Students will:**
- Apply knowledge of the elements of music, structural devices, and technologies through integrating aural, practical, and theoretical skills.

### Developing Ideas

#### Dance

**Students will:**
- Combine and contrast the dance elements to express images, ideas, and feelings in dance, using a variety of choreographic processes.

#### Drama

**Students will:**
- Initiate and refine ideas with others to plan and develop drama.

#### Music – Sound Arts

**Students will:**
- Express, develop, and refine musical ideas, using the elements of music, instruments, and technologies in response to sources of motivation.
- Represent sound and musical ideas in a variety of ways.

### Communicating and Interpreting

#### Dance

**Students will:**
- Prepare and present dance, with an awareness of the performance context.
- Describe and record how the purpose of selected dances is expressed through the movement.

#### Drama

**Students will:**
- Present and respond to drama, identifying ways in which elements, techniques, conventions, and technologies create meaning in their own and others’ work.

#### Music – Sound Arts

**Students will:**
- Prepare, rehearse, and present performance of music, using performance skills and techniques.
- Reflect on the expressive qualities of their own and others’ music, both live and recorded.

#### Visual Arts

**Students will:**
- Investigate the purpose of objects and images from past and present cultures and identify the contexts in which they were or are made, viewed, and valued.
- Explore and use art-making conventions, applying knowledge of elements and selected principles through the use of materials and processes.
- Develop and revisit visual ideas, in response to a variety of motivations, observation, and imagination, supported by the study of artists’ works.
- Explore and describe ways in which meanings can be communicated and interpreted in their own and others’ work.
Personal Health and Physical Development

Students will:

**Personal growth and development**
- Describe the characteristics of pubertal change and discuss positive adjustment strategies.

**Regular physical activity**
- Demonstrate an increasing sense of responsibility for incorporating regular and enjoyable physical activity into their personal lifestyle to enhance well-being.

**Safety management**
- Access and use information to make and action safe choices in a range of contexts.

**Personal identity**
- Describe how social messages and stereotypes, including those in the media, can affect feelings of self-worth.

Movement Concepts and Motor Skills

Students will:

**Movement skills**
- Demonstrate consistency and control of movement in a range of situations.

**Positive attitudes**
- Demonstrate willingness to accept challenges, learn new skills and strategies, and extend their abilities in movement-related activities.

Science and technology
- Experience and demonstrate how science, technology, and the environment influence the selection and use of equipment in a variety of settings.

Challenges and social and cultural factors
- Participate in and demonstrate an understanding of how social and cultural practices are expressed through movement.

Relationships with Other People

Students will:

**Relationships**
- Identify the effects of changing situations, roles, and responsibilities on relationships and describe appropriate responses.

**Identity, sensitivity, and respect**
- Recognise instances of discrimination and act responsibly to support their own rights and feelings and those of other people.

Interpersonal skills
- Describe and demonstrate a range of assertive communication skills and processes that enable them to interact appropriately with other people.

Healthy Communities and Environments

Students will:

**Societal attitudes and values**
- Investigate and describe lifestyle factors and media influences that contribute to the well-being of people in New Zealand.

**Community resources**
- Investigate and/or access a range of community resources that support well-being and evaluate the contribution made by each to the well-being of community members.

**Rights, responsibilities, and laws; People and the environment**
- Specify individual responsibilities and take collective action for the care and safety of other people in their school and in the wider community.

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**Key Competencies**

- **Thinking**
- **Using language, symbols, and texts**
- **Managing self**

- **Relating to others**
- **Participating and contributing**
In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:

**Number and Algebra**

**Number strategies and knowledge**
- Use a range of multiplicative strategies when operating on whole numbers.
- Understand addition and subtraction of fractions, decimals, and integers.
- Find fractions, decimals, and percentages of amounts expressed as whole numbers, simple fractions, and decimals.
- Apply simple linear proportions, including ordering fractions.
- Know the equivalent decimal and percentage forms for everyday fractions.
- Know the relative size and place value structure of positive and negative integers and decimals to three places.

**Equations and expressions**
- Form and solve simple linear equations.

**Patterns and relationships**
- Generalise properties of multiplication and division with whole numbers.
- Use graphs, tables, and rules to describe linear relationships found in number and spatial patterns.

**Geometry and Measurement**

**Measurement**
- Use appropriate scales, devices, and metric units for length, area, volume and capacity, weight (mass), temperature, angle, and time.
- Convert between metric units, using whole numbers and commonly used decimals.
- Use side or edge lengths to find the perimeters and areas of rectangles, parallelograms, and triangles and the volumes of cuboids.
- Interpret and use scales, timetables, and charts.

**Shape**
- Identify classes of two- and three-dimensional shapes by their geometric properties.
- Relate three-dimensional models to two-dimensional representations, and vice versa.

**Position and orientation**
- Communicate and interpret locations and directions, using compass directions, distances, and grid references.

**Transformation**
- Use the invariant properties of figures and objects under transformations (reflection, rotation, translation, or enlargement).

**Statistics**

**Statistical investigation**
- Plan and conduct investigations using the statistical enquiry cycle:
  - determining appropriate variables and data collection methods;
  - gathering, sorting, and displaying multivariate category, measurement, and time-series data to detect patterns, variations, relationships, and trends;
  - comparing distributions visually;
  - communicating findings, using appropriate displays.

**Statistical literacy**
- Evaluate statements made by others about the findings of statistical investigations and probability activities.

**Probability**
- Investigate situations that involve elements of chance by comparing experimental distributions with expectations from models of the possible outcomes, acknowledging variation and independence.
- Use simple fractions and percentages to describe probabilities.
### Nature of Science
**Students will:**

**Understanding about science**
- Appreciate that science is a way of explaining the world and that science knowledge changes over time.
- Identify ways in which scientists work together and provide evidence to support their ideas.

**Investigating in science**
- Build on prior experiences, working together to share and examine their own and others’ knowledge.
- Ask questions, find evidence, explore simple models, and carry out appropriate investigations to develop simple explanations.

**Communicating in science**
- Begin to use a range of scientific symbols, conventions, and vocabulary.
- Engage with a range of science texts and begin to question the purposes for which these texts are constructed.

**Participating and contributing**
- Use their growing science knowledge when considering issues of concern to them.
- Explore various aspects of an issue and make decisions about possible actions.

### Living World
**Students will:**

**Life processes**
- Recognise that there are life processes common to all living things and that these occur in different ways.

**Ecology**
- Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

**Evolution**
- Begin to group plants, animals, and other living things into science-based classifications.
- Explore how the groups of living things we have in the world have changed over long periods of time and appreciate that some living things in New Zealand are quite different from living things in other areas of the world.

### Planet Earth and Beyond
**Students will:**

**Earth systems**
- Develop an understanding that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth’s resources.

**Interacting systems**
- Investigate the water cycle and its effect on climate, landforms, and life.

**Astronomical systems**
- Investigate the components of the solar system, developing an appreciation of the distances between them.

### Physical World
**Students will:**

**Physical inquiry and physics concepts**
- Explore, describe, and represent patterns and trends for everyday examples of physical phenomena, such as movement, forces, electricity and magnetism, light, sound, waves, and heat. For example, identify and describe the effect of forces (contact and non-contact) on the motion of objects; identify and describe everyday examples of sources of energy, forms of energy, and energy transformations.

### Material World
**Students will:**

**Properties and changes of matter**
- Group materials in different ways, based on the observations and measurements of the characteristic chemical and physical properties of a range of different materials.
- Compare chemical and physical changes.

**The structure of matter**
- Begin to develop an understanding of the particle nature of matter and use this to explain observed changes.

**Chemistry and society**
- Relate the observed, characteristic chemical and physical properties of a range of different materials to technological uses and natural processes.
Social Sciences

Level Four

Social Studies

Students will gain knowledge, skills, and experience to:

- Understand how the ways in which leadership of groups is acquired and exercised have consequences for communities and societies.
- Understand how people pass on and sustain culture and heritage for different reasons and that this has consequences for people.
- Understand how exploration and innovation create opportunities and challenges for people, places, and environments.
- Understand that events have causes and effects.
- Understand how producers and consumers exercise their rights and meet their responsibilities.
- Understand how formal and informal groups make decisions that impact on communities.
- Understand how people participate individually and collectively in response to community challenges.

Level Four

Technology

Technological Practice

Students will:

Planning for practice

- Undertake planning that includes reviewing the effectiveness of past actions and resourcing, exploring implications for future actions and accessing of resources, and consideration of stakeholder feedback, to enable the development of an outcome.

Brief development

- Justify the nature of an intended outcome in relation to the need or opportunity. Describe the key attributes identified in stakeholder feedback, which will inform the development of an outcome and its evaluation.

Outcome development and evaluation

- Investigate a context to develop ideas for feasible outcomes. Undertake functional modelling that takes account of stakeholder feedback in order to select and develop the outcome that best addresses the key attributes. Incorporating stakeholder feedback, evaluate the outcome’s fitness for purpose in terms of how well it addresses the need or opportunity.

Technological Knowledge

Students will:

Technological modelling

- Understand how different forms of functional modelling are used to explore possibilities and to justify decision making and how prototyping can be used to justify refinement of technological outcomes.

Technological products

- Understand that materials can be formed, manipulated, and/or transformed to enhance the fitness for purpose of a technological product.

Technological systems

- Understand how technological systems employ control to allow for the transformation of inputs to outputs.

Nature of Technology

Students will:

Characteristics of technology

- Understand how technological development expands human possibilities and how technology draws on knowledge from a wide range of disciplines.

Characteristics of technological outcomes

- Understand that technological outcomes can be interpreted in terms of how they might be used and by whom and that each has a proper function as well as possible alternative functions.
Level Five  English

**Listening, Reading, and Viewing**

**Processes and strategies**

*Students will:*

- Integrate sources of information, processes, and strategies purposefully and confidently to identify, form, and express increasingly sophisticated ideas.

**INDICATORS:**

- selects and reads texts for enjoyment and personal fulfilment;
- recognises, understands, and considers the connections between oral, written, and visual language;
- integrates sources of information and prior knowledge purposefully and confidently to make sense of increasingly varied and complex texts;
- selects and uses appropriate processing and comprehension strategies with confidence;
- thinks critically about texts with understanding and confidence;
- monitors, self-evaluates, and describes progress, articulating learning with confidence.

*By using these processes and strategies when listening, reading, or viewing, students will:*

**Purposes and audiences**

- Show an understanding of how texts are shaped for different purposes and audiences.

**INDICATORS:**

- recognises, understands, and considers how texts are constructed for a range of purposes, audiences, and situations;
- identifies particular points of view within texts and recognises that texts can position a reader;
- evaluates the reliability and usefulness of texts with confidence.

**Ideas**

- Show an understanding of ideas within, across, and beyond texts.

**INDICATORS:**

- makes meaning by understanding increasingly comprehensive ideas in texts and the links between them;
- makes connections by exploring ideas within and between texts from a range of contexts;
- recognises that there may be more than one reading available within a text;
- makes and supports inferences from texts independently.

**Language features**

- Show an understanding of how language features are used for effect within and across texts.

**INDICATORS:**

- identifies oral, written, and visual language features and understands their effects;
- uses an increasing vocabulary to make meaning;
- understands how a range of text conventions work together to create meaning and effect;
- understands that authors have different voices and styles and can identify those differences.

**Structure**

- Show an understanding of a range of structures.

**INDICATOR:**

- identifies and understands the characteristics and conventions of a range of text forms and considers how they contribute to and affect text meaning.

**Speaking, Writing, and Presenting**

**Processes and strategies**

*Students will:*

- Integrate sources of information, processes, and strategies purposefully and confidently to identify, form, and express increasingly sophisticated ideas.

**INDICATORS:**

- uses an increasing understanding of the connections between oral, written, and visual language when creating texts;
- creates a range of increasingly varied and complex texts by integrating sources of information and processing strategies;
- seeks feedback and makes changes to texts to improve clarity, meaning, and effect;
- is reflective about the production of own texts: monitors and self-evaluates progress, articulating learning with confidence.

*By using these processes and strategies when speaking, writing, or presenting, students will:*

**Purposes and audiences**

- Show an understanding of how to shape texts for different audiences and purposes.

**INDICATORS:**

- constructs a range of texts that demonstrate an understanding of purpose and audience through deliberate choice of content, language, and text form;
- conveys and sustains personal voice where appropriate.

**Ideas**

- Select, develop, and communicate purposeful ideas on a range of topics.

**INDICATORS:**

- develops and communicates increasingly comprehensive ideas, information, and understandings;
- develops ideas by adding details or making links to other ideas and details;
- ideas show an awareness of a range of dimensions or viewpoints.

**Language features**

- Select and use a range of language features appropriately, showing an understanding of their effects.

**INDICATORS:**

- uses a wide range of oral, written, and visual language features to create meaning and effect and to sustain interest;
- uses an increasing range of vocabulary to communicate precise meaning;
- uses a wide range of text conventions, including grammatical and spelling conventions, appropriately, effectively, and with increasing accuracy.

**Structure**

- Organise texts using a range of appropriate, effective structures.

**INDICATORS:**

- achieves a sense of coherence and wholeness when constructing texts;
- organises and develops ideas and information for a particular purpose or effect, using the characteristics and conventions of a range of text forms.
## Level Five The Arts

### Dance
**Students will:**
- Compare and contrast dances from a variety of past and present cultures and contexts.
- Develop a variety of skills, dance techniques, vocabularies, and movement practices.
- Manipulate the elements and explore the use of choreographic devices and structures to organise dance movement.
- Prepare, rehearse, and perform dance with an awareness of production technologies.
- Reflect on and describe how choreography communicates ideas, feelings, moods, and experiences.

### Drama
**Students will:**
- Investigate the characteristics, purposes, and function of drama in a range of contexts.
- Select and use techniques, conventions, and relevant technologies for specific drama purposes.
- Select and refine ideas to develop drama for specific purposes.
- Present and respond to drama and describe how drama combines elements, techniques, conventions, and technologies to create structure and meaning in their own and others' work.

### Music – Sound Arts
**Students will:**
- Compare and contrast the characteristics of music associated with a range of sound environments, in relation to historical, social, and cultural contexts.
- Investigate how music serves a variety of purposes and functions in their lives and in their communities.
- Apply knowledge of the elements of music, structural devices, stylistic conventions, and technologies through integrating aural, practical, and theoretical skills.
- Use musical elements, instruments, technologies, and conventions to express, develop, and refine structured compositions and improvisations.
- Represent compositions and improvisation frameworks, using appropriate conventions.
- Prepare, rehearse, and present performances of music, using a range of performance skills and techniques.
- Reflect on the expressive qualities of their own and others' music, both live and recorded.

### Visual Arts
**Students will:**
- Investigate and consider the relationship between the production of art works and their contexts and influences.
- Apply knowledge of selected conventions from established practice, using appropriate processes and procedures.
- Generate, develop, and refine ideas in response to a variety of motivations, including the study of established practice.
- Compare and contrast the ways in which ideas and art-making processes are used to communicate meaning in selected objects and images.
## Personal Health and Physical Development

**Students will:**

**Personal growth and development**
- Describe physical, social, emotional, and intellectual processes of growth and relate these to features of adolescent development and effective self-management strategies.

**Regular physical activity**
- Experience a range of personally enjoyable physical activities and describe how varying levels of involvement affect well-being and lifestyle balance.

**Safety management**
- Investigate and practise safety procedures and strategies to manage risk situations.

**Personal identity**
- Investigate and describe the ways in which individuals define their own identity and sense of self-worth and how this influences the ways in which they describe other people.

## Movement Concepts and Motor Skills

**Students will:**

**Movement skills**
- Acquire and apply complex motor skills by using basic principles of motor learning.

**Positive attitudes**
- Develop skills and responsible attitudes in challenging physical situations.

**Science and technology**
- Investigate and experience ways in which scientific, technological, and environmental knowledge and resources assist in and influence people’s participation in regular physical activity.

**Challenges and social and cultural factors**
- Investigate and experience ways in which people’s physical competence and participation are influenced by social and cultural factors.

## Relationships with Other People

**Students will:**

**Relationships**
- Identify issues associated with relationships and describe options to achieve positive outcomes.

**Identity, sensitivity, and respect**
- Demonstrate an understanding of how attitudes and values relating to difference influence their own safety and that of other people.

**Interpersonal skills**
- Demonstrate a range of interpersonal skills and processes that help them to make safe choices for themselves and other people in a variety of settings.

## Healthy Communities and Environments

**Students will:**

**Societal attitudes and values**
- Investigate societal influences on the well-being of student communities.

**Community resources**
- Investigate community services that support and promote people’s well-being and take action to promote personal and group involvement.

**Rights, responsibilities, and laws**
- Identify the rights and responsibilities of consumers and use this information to evaluate health and recreational services and products in the community.

**People and the environment**
- Investigate and evaluate aspects of the school environment that affect people’s well-being and take action to enhance these aspects.

## Key Competencies

- **Thinking**
  - Using language, symbols, and texts
  - Participating and contributing

- **Managing self**
  - Relating to others
Level Five Mathematics and Statistics

In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:

Number and Algebra

Number strategies and knowledge
- Reason with linear proportions.
- Use prime numbers, common factors and multiples, and powers (including square roots).
- Understand operations on fractions, decimals, percentages, and integers.
- Use rates and ratios.
- Know commonly used fraction, decimal, and percentage conversions.
- Know and apply standard form, significant figures, rounding, and decimal place value.

Equations and expressions
- Form and solve linear and simple quadratic equations.

Patterns and relationships
- Generalise the properties of operations with fractional numbers and integers.
- Relate tables, graphs, and equations to linear and simple quadratic relationships found in number and spatial patterns.

Geometry and Measurement

Measurement
- Select and use appropriate metric units for length, area, volume and capacity, weight (mass), temperature, angle, and time, with awareness that measurements are approximate.
- Convert between metric units, using decimals.
- Deduce and use formulae to find the perimeters and areas of polygons and the volumes of prisms.
- Find the perimeters and areas of circles and composite shapes and the volumes of prisms, including cylinders.

Shape
- Deduce the angle properties of intersecting and parallel lines and the angle properties of polygons and apply these properties.
- Create accurate nets for simple polyhedra and connect three-dimensional solids with different two-dimensional representations.

Position and orientation
- Construct and describe simple loci.
- Interpret points and lines on coordinate planes, including scales and bearings on maps.

Transformation
- Define and use transformations and describe the invariant properties of figures and objects under these transformations.
- Apply trigonometric ratios and Pythagoras’ theorem in two dimensions.

Statistics

Statistical investigation
- Plan and conduct surveys and experiments using the statistical enquiry cycle:
  - determining appropriate variables and measures;
  - considering sources of variation;
  - gathering and cleaning data;
  - using multiple displays, and re-categorising data to find patterns, variations, relationships, and trends in multivariate data sets;
  - comparing sample distributions visually, using measures of centre, spread, and proportion;
  - presenting a report of findings.

Statistical literacy
- Evaluate statistical investigations or probability activities undertaken by others, including data collection methods, choice of measures, and validity of findings.

Probability
- Compare and describe the variation between theoretical and experimental distributions in situations that involve elements of chance.
- Calculate probabilities, using fractions, percentages, and ratios.

See separate chart Learning Languages
### Nature of Science

**Students will:**

**Understanding about science**
- Understand that scientists’ investigations are informed by current scientific theories and aim to collect evidence that will be interpreted through processes of logical argument.

**Investigating in science**
- Develop and carry out more complex investigations, including using models.
- Show an increasing awareness of the complexity of working scientifically, including recognition of multiple variables.
- Begin to evaluate the suitability of the investigative methods chosen.

**Communicating in science**
- Use a wider range of science vocabulary, symbols, and conventions.
- Apply their understandings of science to evaluate both popular and scientific texts (including visual and numerical literacy).

**Participating and contributing**
- Develop an understanding of socio-scientific issues by gathering relevant scientific information in order to draw evidence-based conclusions and to take action where appropriate.

### Living World

**Students will:**

**Life processes**
- Identify the key structural features and functions involved in the life processes of plants and animals.
- Describe the organisation of life at the cellular level.

**Ecology**
- Investigate the interdependence of living things (including humans) in an ecosystem.

**Evolution**
- Describe the basic processes by which genetic information is passed from one generation to the next.

### Planet Earth and Beyond

**Students will:**

**Earth systems**
- Investigate the composition, structure, and features of the geosphere, hydrosphere, and atmosphere.

**Interacting systems**
- Investigate how heat from the Sun, the Earth, and human activities is distributed around Earth by the geosphere, hydrosphere, and atmosphere.

**Astronomical systems**
- Investigate the conditions on the planets and their moons, and the factors affecting them.

### Physical World

**Students will:**

**Physical inquiry and physics concepts**
- Identify and describe the patterns associated with physical phenomena found in simple everyday situations involving movement, forces, electricity and magnetism, light, sound, waves, and heat. For example, identify and describe energy changes and conservation of energy, simple electrical circuits, and the effect of contact and non-contact on the motion of objects.

**Using physics**
- Explore a technological or biological application of physics.

### Material World

**Students will:**

**Properties and changes of matter**
- Investigate the chemical and physical properties of different groups of substances, for example, acids and bases, fuels, and metals.
- Distinguish between pure substances and mixtures and between elements and compounds.

**The structure of matter**
- Describe the structure of the atoms of different elements.
- Distinguish between an element and a compound, a pure substance and a mixture at particle level.

**Chemistry and society**
- Link the properties of different groups of substances to the way they are used in society or occur in nature.
Level Five  Social Sciences

Social Studies

Students will gain knowledge, skills, and experience to:

• Understand how systems of government in New Zealand operate and affect people’s lives, and how they compare with another system.
• Understand how the Treaty of Waitangi is responded to differently by people in different times and places.
• Understand how cultural interaction impacts on cultures and societies.
• Understand that people move between places and how this has consequences for the people and the places.
• Understand how economic decisions impact on people, communities, and nations.
• Understand how people’s management of resources impacts on environmental and social sustainability.
• Understand how the ideas and actions of people in the past have had a significant impact on people’s lives.
• Understand how people define and seek human rights.

Level Five  Technology

Technological Practice

Students will:

Planning for practice

• Analyse their own and others’ planning practices to inform the selection and use of planning tools. Use these to support and justify planning decisions [including those relating to the management of resources] that will see the development of an outcome through to completion.

Brief development

• Justify the nature of an intended outcome in relation to the need or opportunity. Describe specifications that reflect key stakeholder feedback and that will inform the development of an outcome and its evaluation.

Outcome development and evaluation

• Analyse their own and others’ outcomes to inform the development of ideas for feasible outcomes. Undertake ongoing functional modelling and evaluation that takes account of key stakeholder feedback and trialling in the physical and social environments. Use the information gained to select and develop the outcome that best addresses the specifications. Evaluate the final outcome’s fitness for purpose against the brief.

Technological Knowledge

Students will:

Technological modelling

• Understand how evidence, reasoning, and decision making in functional modelling contribute to the development of design concepts and how prototyping can be used to justify ongoing refinement of outcomes.

Technological products

• Understand how materials are selected, based on desired performance criteria.

Technological systems

• Understand the properties of subsystems within technological systems.

Nature of Technology

Students will:

Characteristics of technology

• Understand how people’s perceptions and acceptance of technology impact on technological developments and how and why technological knowledge becomes codified.

Characteristics of technological outcomes

• Understand that technological outcomes are fit for purpose in terms of time and context. Understand the concept of malfunction and how “failure” can inform future outcomes.
Level Six English

Listening, Reading, and Viewing

Processes and strategies
Students will:

• Integrate sources of information, processes, and strategies purposefully and confidently to identify, form, and express increasingly sophisticated ideas.

INDICATORS:
– selects and reads texts for enjoyment and personal fulfilment;
– recognises, understands, and considers the connections between oral, written, and visual language;
– integrates sources of information and prior knowledge purposefully and confidently to make sense of increasingly varied and complex texts;
– selects and uses appropriate processing and comprehension strategies with confidence;
– thinks critically about texts with understanding and confidence;
– monitors, self-evaluates, and describes progress, articulating learning with confidence.

By using these processes and strategies when listening, reading, or viewing, students will:

Purposes and audiences
• Show a developed understanding of how texts are shaped for different purposes and audiences.

INDICATORS:
– recognises, understands, and considers how texts are constructed for a range of purposes, audiences, and situations;
– identifies particular points of view within texts and recognises that texts can position a reader;
– evaluates the reliability and usefulness of texts with confidence.

Ideas
• Show a developed understanding of ideas within, across, and beyond texts.

INDICATORS:
– makes meaning by understanding comprehensive ideas;
– makes connections by interpreting ideas within and between texts from a range of contexts;
– recognises that there may be more than one reading available within a text;
– makes and supports inferences from texts independently.

Language features
• Show a developed understanding of how language features are used for effect within and across texts.

INDICATORS:
– identifies a range of oral, written, and visual language features and understands their effects;
– uses an increasing vocabulary to make meaning;
– understands and interprets how text conventions work together to create meaning and effect;
– understands that authors have different voices and styles and identifies and can explain these differences.

Structure
• Show a developed understanding of a range of structures.

INDICATOR:
– identifies and understands the characteristics and conventions of a range of text forms and considers how they contribute to and affect text meaning.

Speaking, Writing, and Presenting

Processes and strategies
Students will:

• Integrate sources of information, processes, and strategies purposefully and confidently to identify, form, and express increasingly sophisticated ideas.

INDICATORS:
– uses an increasing understanding of the connections between oral, written, and visual language when creating texts;
– creates a range of increasingly varied and complex texts by integrating sources of information and processing strategies;
– seeks feedback and makes changes to texts to improve clarity, meaning, and effect;
– is reflective about the production of own texts: monitors and self-evaluates progress, articulating learning with confidence.

By using these processes and strategies when speaking, writing, or presenting, students will:

Purposes and audiences
• Show a developed understanding of how to shape texts for different audiences and purposes.

INDICATORS:
– constructs a range of texts that demonstrate an understanding of purpose and audience through deliberate choice of content, language, and text form;
– conveys and sustains personal voice where appropriate.

Ideas
• Select, develop, and communicate connected ideas on a range of topics.

INDICATORS:
– develops and communicates comprehensive ideas, information, and understandings;
– works towards creating coherent, planned whole texts by adding details to ideas or making links to other ideas and details;
– ideas show an understanding and awareness of a range of dimensions or viewpoints.

Language features
• Select and use a range of language features appropriately for a variety of effects.

INDICATORS:
– uses a wide range of oral, written, and visual language features with control to create meaning and effect and to sustain interest;
– uses an increasing vocabulary to communicate precise meaning;
– uses a wide range of text conventions, including grammatical and spelling conventions, appropriately, effectively, and with accuracy.

Structure
• Organise texts, using a range of appropriate, effective structures.

INDICATORS:
– achieves a sense of coherence and wholeness when constructing texts;
– organises and develops ideas and information for a particular purpose or effect, using the characteristics and conventions of a range of text forms.
### Level Six: The Arts

#### Understanding the Arts in Context

**Dance**

*Students will:*
- Explore, investigate, and describe the features and backgrounds of a variety of dance genres and styles.

**Developing Practical Knowledge**

- Develop and demonstrate skills in selected dance genres and styles and explore the use of a variety of technologies.

**Developing Ideas**

- Select and use choreographic devices, structures, processes, and technologies to develop and give form to dance ideas.

**Communicating and Interpreting**

- Prepare, rehearse, and perform a range of dances and demonstrate an understanding of the performance requirements of the genres and contexts.
- Describe, explain, and respond to the ways that dance uses elements, devices, structures, performance skills, and production technologies to communicate images, themes, feelings, and moods.

#### Drama

*Students will:*
- Investigate the forms and purposes of drama in different historical or contemporary contexts, including New Zealand drama.

**Developing Practical Knowledge**

- Select and use techniques, conventions, and technologies in a range of dramatic forms.

**Developing Ideas**

- Research, evaluate, and refine ideas in a range of dramatic forms to develop drama.

**Communicating and Interpreting**

- Perform and respond to drama and make critical judgments about how elements, techniques, conventions, and technologies are used to create form and meaning in their own and others’ work.

#### Music – Sound Arts

*Students will:*
- Analyse music from a range of sound environments, styles, and genres, in relation to historical, social, and cultural contexts.
- Consider and reflect on the influence of music in their own music making and in their lives.

**Developing Practical Knowledge**

- Apply knowledge of expressive features, stylistic conventions, and technologies through an integration of aural perception and practical and theoretical skills and describe how they are used in a range of music.

**Developing Ideas**

- Create, structure, refine, and represent compositions using the elements of music, instruments, technologies, and conventions to express imaginative thinking and personal understandings.
- Reflect on composition processes and presentation conventions.

**Communicating and Interpreting**

- Prepare, rehearse, interpret, and present performances of music individually and collaboratively, using a range of performance skills and techniques.
- Reflect on the expressive qualities of music and evaluate their own and others’ music, both live and recorded.

#### Visual Arts

*Students will:*
- Investigate and analyse the relationship between the production of art works and the contexts in which they are made, viewed, and valued.
- Consider and reflect on the contexts underlying their own and others’ work.

**Developing Practical Knowledge**

- Apply knowledge of a range of conventions from established practice, using appropriate processes and procedures.

**Developing Ideas**

- Generate, develop, and clarify ideas, showing some understanding of established practice.
- Sequence and link ideas systematically as they solve problems in a body of work, using observation and invention with an appropriate selection of materials.

**Communicating and Interpreting**

- Identify and analyse processes and procedures from established practice that influence ways of communicating meaning.
- Investigate, analyse, and evaluate ideas and interpret artists’ intentions in art works.
### Personal Health and Physical Development

**Students will:**

- **Personal growth and development**
  - Investigate and understand reasons for the choices people make that affect their well-being and explore and evaluate options and consequences.

- **Regular physical activity**
  - Choose and maintain ongoing involvement in appropriate physical activities and examine factors influencing their participation.

- **Safety management**
  - Demonstrate understanding of responsible behaviours required to ensure that challenges and risks are managed safely in physical and social environments.

- **Personal identity**
  - Demonstrate an understanding of factors that contribute to personal identity and affirm diversity.

### Movement Concepts and Motor Skills

**Students will:**

- **Movement skills**
  - Acquire, apply, and refine specialised motor skills by using the principles of motor skill learning.

- **Positive attitudes**
  - Demonstrate and examine responsible attitudes in challenging physical situations.

### Relationships with Other People

**Students will:**

- **Relationships**
  - Demonstrate an understanding of how individuals and groups affect relationships by influencing people’s behaviour, beliefs, decisions, and sense of self-worth.

- **Identity, sensitivity, and respect**
  - Plan and evaluate strategies recognising their own and other people’s rights and responsibilities to avoid or minimise risks in social situations.

### Healthy Communities and Environments

**Students will:**

- **Societal attitudes and values**
  - Analyse societal influences that shape community health goals and physical activity patterns.

- **Community resources**
  - Advocate for the development of services and facilities to meet identified needs in the school and the community.

- **Rights, responsibilities, and laws**
  - Compare and contrast personal values and practices with policies, rules, and laws and investigate how the latter contribute to safety in the school and community.

### People and the environment

- **Investigate the roles and the effectiveness of local, national, and international organisations that promote well-being and environmental care.**

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### Key Competencies

- **Thinking**
  - Relating to others

- **Using language, symbols, and texts**
  - Participating and contributing

- **Managing self**
Level Six  Mathematics and Statistics

In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:

**Number and Algebra**

**Number strategies and knowledge**
- Apply direct and inverse relationships with linear proportions.
- Extend powers to include integers and fractions.
- Apply everyday compounding rates.
- Find optimal solutions, using numerical approaches.

**Equations and expressions**
- Form and solve linear equations and inequalities, quadratic and simple exponential equations, and simultaneous equations with two unknowns.

**Patterns and relationships**
- Generalise the properties of operations with rational numbers, including the properties of exponents.
- Relate graphs, tables, and equations to linear, quadratic, and simple exponential relationships found in number and spatial patterns.
- Relate rate of change to the gradient of a graph.

**Geometry and Measurement**

**Measurement**
- Measure at a level of precision appropriate to the task.
- Apply the relationships between units in the metric system, including the units for measuring different attributes and derived measures.
- Calculate volumes, including prisms, pyramids, cones, and spheres, using formulae.

**Shape**
- Deduce and apply the angle properties related to circles.
- Recognise when shapes are similar and use proportional reasoning to find an unknown length.
- Use trigonometric ratios and Pythagoras’ theorem in two and three dimensions.

**Position and orientation**
- Use a co-ordinate plane or map to show points in common and areas contained by two or more loci.

**Transformation**
- Compare and apply single and multiple transformations.
- Analyse symmetrical patterns by the transformations used to create them.

**Statistics**

**Statistical investigation**
- Plan and conduct investigations using the statistical enquiry cycle:
  - justifying the variables and measures used;
  - managing sources of variation, including through the use of random sampling;
  - identifying and communicating features in context (trends, relationships between variables, and differences within and between distributions), using multiple displays;
  - making informal inferences about populations from sample data;
  - justifying findings, using displays and measures.

**Statistical literacy**
- Evaluate statistical reports in the media by relating the displays, statistics, processes, and probabilities used to the claims made.

**Probability**
- Investigate situations that involve elements of chance:
  - comparing discrete theoretical distributions and experimental distributions, appreciating the role of sample size;
  - calculating probabilities in discrete situations.

See separate chart  Learning Languages
Nature of Science

Students will:

Understanding about science
• Understand that scientists’ investigations are informed by current scientific theories and aim to collect evidence that will be interpreted through processes of logical argument.

Investigating in science
• Develop and carry out more complex investigations, including using models.
• Show an increasing awareness of the complexity of working scientifically, including recognition of multiple variables.
• Begin to evaluate the suitability of the investigative methods chosen.

Communicating in science
• Use a wider range of science vocabulary, symbols, and conventions.
• Apply their understandings of science to evaluate both popular and scientific texts (including visual and numerical literacy).

Participating and contributing
• Develop an understanding of socio-scientific issues by gathering relevant scientific information in order to draw evidence-based conclusions and to take action where appropriate.

Living World

Students will:

Life processes
• Relate key structural features and functions to the life processes of plants, animals, and microorganisms and investigate environmental factors that affect these processes.

Ecology
• Investigate the impact of natural events and human actions on a New Zealand ecosystem.

Evolution
• Explore patterns in the inheritance of genetically controlled characteristics.
• Explain the importance of variation within a changing environment.

Planet Earth and Beyond

Students will:

Earth systems
• Investigate the external and internal processes that shape and change the surface features of New Zealand.

Interacting systems
• Develop an understanding of how the geosphere, hydrosphere, atmosphere, and biosphere interact to cycle carbon around Earth.

Astronomical systems
• Investigate the interactions between the solar, lunar, and Earth cycles and the effect of these on Earth.

Physical World

Students will:

Physical inquiry and physics concepts
• Investigate trends and relationships in physical phenomena (in the areas of mechanics, electricity, electromagnetism, heat, light and waves, and atomic and nuclear physics).
• Demonstrate an understanding of physical phenomena and concepts by explaining and solving questions and problems that relate to straightforward situations.

Using physics
• Investigate how physics knowledge is used in a technological or biological application.

Material World

Students will:

Properties and changes of matter
• Identify patterns and trends in the properties of a range of groups of substances, for example, acids and bases, metals, metal compounds, and hydrocarbons.
• Explore factors that affect chemical processes.

The structure of matter
• Distinguish between atoms, molecules, and ions (includes covalent and ionic bonding).
• Link atomic structure to the organisation of the periodic table.
• Use particle theory to explain factors that affect chemical processes.

Chemistry and society
• Investigate how chemical knowledge is used in a technological application of chemistry.
Level Six  Social Sciences

Social Studies
• Understand how individuals, groups, and institutions work to promote social justice and human rights.
• Understand how cultures adapt and change and that this has consequences for society.

History
• Understand how the causes and consequences of past events that are of significance to New Zealanders shape the lives of people and society.
• Understand how people’s perspectives on past events that are of significance to New Zealanders differ.

Geography
• Understand that natural and cultural environments have particular characteristics and how environments are shaped by processes that create spatial patterns.
• Understand how people interact with natural and cultural environments and that this interaction has consequences.

Economics
• Understand how, as a result of scarcity, consumers, producers, and government make choices that affect New Zealand society.
• Understand how the different sectors of the New Zealand economy are interdependent.

Level Six  Technology

Technological Practice
Students will:

Planning for practice
• Critically analyse their own and others’ past and current planning practices in order to make informed selection and effective use of planning tools. Use these to support and justify ongoing planning that will see the development of an outcome through to completion.

Brief development
• Justify the nature of an intended outcome in relation to the need or opportunity and justify specifications in terms of key stakeholder feedback and wider community considerations.

Outcome development and evaluation
• Critically analyse their own and others’ outcomes to inform the development of ideas for feasible outcomes. Undertake ongoing experimentation and functional modelling, taking account of stakeholder feedback and trialling in the physical and social environments. Use the information gained to select, justify, and develop a final outcome. Evaluate this outcome’s fitness for purpose against the brief and justify the evaluation, using feedback from stakeholders.

Technological Knowledge
Students will:

Technological modelling
• Understand the role and nature of evidence and reasoning when managing risk through technological modelling.

Technological products
• Understand how materials are formed, manipulated, and transformed in different ways, depending on their properties, and understand the role of material evaluation in determining suitability for use in product development.

Technological systems
• Understand the implications of subsystems for the design, development, and maintenance of technological systems.

Nature of Technology
Students will:

Characteristics of technology
• Understand the interdisciplinary nature of technology and the implications of this for maximising possibilities through collaborative practice.

Characteristics of technological outcomes
• Understand that some technological outcomes can be perceived as both product and system. Understand how these outcomes impact on other outcomes and practices and on people’s views of themselves and possible futures.
## Level Seven English

### Listening, Reading, and Viewing

**Processes and strategies**

**Students will:**
- Integrate sources of information, processes, and strategies purposefully, confidently, and precisely to identify, form, and express increasingly sophisticated ideas.

**INDICATORS:**
- selects and reads texts for enjoyment and personal fulfilment;
- recognises, understands, and appreciates the connections between oral, written, and visual language;
- integrates sources of information and prior knowledge purposefully, confidently, and precisely to make sense of increasingly varied and complex texts;
- selects and uses appropriate processing and comprehension strategies with confidence and discrimination;
- thinks critically about texts with understanding and confidence;
- monitors, self-evaluates, and describes progress, articulating learning with confidence.

**By using these processes and strategies when listening, reading, or viewing, students will:**

**Purposes and audiences**
- Show a discriminating understanding of how texts are shaped for different purposes and audiences.

**INDICATORS:**
- recognises, understands, and appreciates how texts are constructed for a range of intentions and situations;
- identifies particular points of view within texts and understands that texts can position a reader;
- evaluates the reliability and usefulness of texts.

**Ideas**
- Show a discriminating understanding of ideas within, across, and beyond texts.

**INDICATORS:**
- makes meaning by understanding increasingly sophisticated ideas;
- makes connections by analysing ideas within and between texts from a range of contexts;
- understands that there may be multiple readings available within a text;
- makes and supports inferences from texts independently.

**Language features**
- Show a discriminating understanding of how language features are used for effect within and across texts.

**INDICATORS:**
- identifies a range of increasingly sophisticated oral, written, and visual language features and understands their effects;
- uses an increasing vocabulary to make meaning;
- understands and analyses how text conventions work together to create meaning and effect;
- understands that authors have different voices and styles and appreciates these differences.

**Structure**
- Show a discriminating understanding of a range of structures.

**INDICATOR:**
- identifies and understands the characteristics and conventions of a range of text forms and appreciates how they contribute to and affect text meaning.

### Speaking, Writing, and Presenting

**Processes and strategies**

**Students will:**
- Integrate sources of information, processes, and strategies purposefully, confidently, and precisely to identify, form, and express increasingly sophisticated ideas.

**INDICATORS:**
- uses an increasing understanding of the connections between oral, written, and visual language when creating texts;
- creates a range of increasingly coherent, varied, and complex texts by integrating sources of information and processing strategies;
- seeks feedback and makes changes to texts to improve clarity, meaning, and effect;
- is reflective about the production of own texts; monitors and self-evaluates progress, articulating learning with confidence.

**By using these processes and strategies when speaking, writing, or presenting, students will:**

**Purposes and audiences**
- Show a discriminating understanding of how to shape texts for different audiences and purposes.

**INDICATORS:**
- constructs a range of texts that demonstrate an understanding and appreciation of purpose and audience through deliberate choice of content, language, and text form;
- conveys and sustains personal voice where appropriate.

**Ideas**
- Select, develop, and communicate sustained ideas on a range of topics.

**INDICATORS:**
- develops, communicates, and sustains increasingly sophisticated ideas, information, and understandings;
- creates coherent, planned whole texts by adding details to ideas or making links to other ideas and details;
- ideas show depth of thought and awareness of a range of dimensions or viewpoints.

**Language features**
- Select and integrate a range of language features appropriately for a variety of effects.

**INDICATORS:**
- uses a wide range of oral, written, and visual language features fluently and with control to create meaning and effect and to sustain interest;
- uses an increasing vocabulary to communicate precise meaning;
- uses a wide range of text conventions, including grammatical and spelling conventions, appropriately, effectively, and with accuracy.

**Structure**
- Organise texts, using a range of appropriate, coherent, and effective structures.

**INDICATOR:**
- organises and develops ideas and information for a particular purpose or effect, using the characteristics and conventions of a range of text forms with control.
# The Arts

## Level Seven

### Understanding the Arts in Context

#### Dance

*Students will:*
- Investigate and evaluate the effects of individual, social, cultural, and technological influences on the development of a variety of dance genres and styles.
- Extend skills in the vocabulary, practices, and technologies of selected dance genres and styles.

#### Drama

*Students will:*
- Research the purposes of production, performance, and technologies of drama in a range of contexts, including New Zealand drama.
- Select and refine the use of techniques, conventions, and technologies in specific dramatic forms.

#### Music – Sound Arts

*Students will:*
- Research and analyse music from a range of sound environments, styles, and genres, in relation to historical, social, and cultural contexts, considering the impact on music making and production.
- Apply knowledge of expressive features, stylistic conventions, and technologies through an integration of aural perception and practical and theoretical skills and analyse how they are used in a range of music.

#### Visual Arts

*Students will:*
- Research and analyse the influences of contexts on the characteristics and production of art works.
- Generate, analyse, clarify, and extend ideas in a selected field related to established practice.
- Use a systematic approach to the development of ideas in a body of work.
- Research and analyse how art works are constructed and presented to communicate meanings.
Level Seven Health and Physical Education

**Personal Health and Physical Development**

*Students will:*

- Assess their health needs and identify strategies to ensure personal well-being across their lifespan.

**Regular physical activity**

- Plan, implement, and evaluate a physical activity programme and examine factors used to justify physical activity as a means of enhancing well-being.

**Safety management**

- Analyse the difference between perceived and residual risks in physical and social environments and develop skills and behaviour for managing responsible action.

**Personal identity**

- Critically evaluate societal attitudes, values, and expectations that affect people’s awareness of their personal identity and sense of self-worth in a range of life situations.

**Movement Concepts and Motor Skills**

*Students will:*

- Appraise specialised motor skills and adapt them to extend physical competence and recreational opportunities.

**Positive attitudes**

- Adapt skills and appraise responsible attitudes in challenging physical situations and unfamiliar environments.

**Science and technology**

- Apply relevant scientific, technological, and environmental knowledge and use appropriate resources to improve performance in a specialised physical activity.

**Challenges and social and cultural factors**

- Appraise, adapt, and use physical activities to ensure that specific social and cultural needs are met.

**Relationships with Other People**

*Students will:*

- Analyse the nature and benefits of meaningful interpersonal relationships.

**Identity, sensitivity, and respect**

- Analyse the beliefs, attitudes, and practices that reinforce stereotypes and role expectations, identifying ways in which these shape people’s choices at individual, group, and societal levels.

**Interpersonal skills**

- Evaluate information, make informed decisions, and use interpersonal skills effectively to manage conflict, competition, and change in relationships.

**Healthy Communities and Environments**

*Students will:*

- Analyse ways in which events and social organisations promote healthy communities and evaluate the effects they have.

**Community resources**

- Evaluate school and community initiatives that promote young people’s well-being and develop an action plan to instigate or support these.

**Rights, responsibilities, and laws**

- Evaluate laws, policies, practices, and regulations in terms of their contribution to social justice at school and in the wider community.

**People and the environment**

- Analyse ways in which the environment and the well-being of a community are affected by population pressure and technological processes.

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### Key Competencies

- **Thinking**
- **Using language, symbols, and texts**
- **Managing self**
- **Relating to others**
- **Participating and contributing**
In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:

### Mathematics

#### Patterns and relationships
- Apply co-ordinate geometry techniques to points and lines.
- Display the graphs of linear and non-linear functions and connect the structure of the functions with their graphs.
- Use arithmetic and geometric sequences and series.
- Apply trigonometric relationships, including the sine and cosine rules, in two and three dimensions.
- Choose appropriate networks to find optimal solutions.

#### Equations and expressions
- Manipulate rational, exponential, and logarithmic algebraic expressions.
- Form and use linear, quadratic, and simple trigonometric equations.
- Form and use pairs of simultaneous equations, one of which may be non-linear.

#### Calculus
- Sketch the graphs of functions and their gradient functions and describe the relationship between these graphs.
- Apply differentiation and anti-differentiation techniques to polynomials.

### Statistics

#### Statistical investigation
- Carry out investigations of phenomena, using the statistical enquiry cycle:
  - conducting surveys that require random sampling techniques, conducting experiments, and using existing data sets;
  - evaluating the choice of measures for variables and the sampling and data collection methods used;
  - using relevant contextual knowledge, exploratory data analysis, and statistical inference.
- Make inferences from surveys and experiments:
  - making informal predictions, interpolations, and extrapolations;
  - using sample statistics to make point estimates of population parameters;
  - recognising the effect of sample size on the variability of an estimate.

#### Statistical literacy
- Evaluate statistically based reports:
  - interpreting risk and relative risk;
  - identifying sampling and possible non-sampling errors in surveys, including polls.

#### Probability
- Investigate situations that involve elements of chance:
  - comparing theoretical continuous distributions, such as the normal distribution, with experimental distributions;
  - calculating probabilities, using such tools as two-way tables, tree diagrams, simulations, and technology.
Level Seven Science

Nature of Science
Students will:
Understanding about science
- Understand that scientists have an obligation to connect their new ideas to current and historical scientific knowledge and to present their findings for peer review and debate.

Investigating in science
- Develop and carry out investigations that extend their science knowledge, including developing their understanding of the relationship between investigations and scientific theories and models.

Communicating in science
- Use accepted science knowledge, vocabulary, symbols, and conventions when evaluating accounts of the natural world and consider the wider implications of the methods of communication and/or representation employed.

 Participating and contributing
- Use relevant information to develop a coherent understanding of socio-scientific issues that concern them, to identify possible responses at both personal and societal levels.

Living World
Students will:
Life processes
- Explore the diverse ways in which animals and plants carry out the life processes.

Ecology
- Explore ecological distribution patterns and explain possible causes for these patterns.

Evolution
- Understand that DNA and the environment interact in gene expression.

Ecology and evolution
- Explain how the interaction between ecological factors and natural selection leads to genetic changes within populations.

Planet Earth and Beyond
Students will:
Earth systems and interacting systems
- Develop an understanding of the causes of natural hazards and their interactions with human activity on Earth.

Astronomical systems
- Explain the nature and life cycles of different types of stars in terms of energy changes and time.

Physical World
Students will:
Physical inquiry and physics concepts
- Investigate physical phenomena (in the areas of mechanics, electricity, electromagnetism, light and waves, and atomic and nuclear physics) and produce qualitative and quantitative explanations for a variety of unfamiliar situations.

Using physics
- Use physics ideas to explain a technological or biological application of physics.

Material World
Students will:
Properties and changes of matter
- Investigate and measure the chemical and physical properties of a range of groups of substances, for example, acids and bases, oxidants and reductants, and selected organic and inorganic compounds.

The structure of matter
- Relate properties of matter to structure and bonding.

Develop an understanding of and use the fundamental concepts of chemistry (for example, equilibrium and thermochemical principles) to interpret observations.

Chemistry and society
- Apply knowledge of chemistry to explain aspects of the natural world and how chemistry is used in society to meet needs, resolve issues, and develop new technologies.
**Level Seven Social Sciences**

Students will gain knowledge, skills, and experience to:

<table>
<thead>
<tr>
<th>Social Studies</th>
<th>History</th>
<th>Geography</th>
<th>Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Understand how communities and nations meet their responsibilities and exercise their rights in local, national, and global contexts.</td>
<td>• Understand how historical forces and movements have influenced the causes and consequences of events of significance to New Zealanders.</td>
<td>• Understand how the processes that shape natural and cultural environments change over time, vary in scale and from place to place, and create spatial patterns.</td>
<td>• Understand how economic concepts and models provide a means of analysing contemporary New Zealand issues.</td>
</tr>
<tr>
<td>• Understand how conflicts can arise from different cultural beliefs and ideas and be addressed in different ways with differing outcomes.</td>
<td>• Understand how people’s interpretations of events that are of significance to New Zealanders differ.</td>
<td>• Understand how people’s perceptions of and interactions with natural and cultural environments differ and have changed over time.</td>
<td>• Understand how government policies and contemporary issues interact.</td>
</tr>
</tbody>
</table>

**Level Seven Technology**

**Technological Practice**

Students will:

- **Planning for practice**
  • Critically analyse their own and others’ past and current planning and management practices in order to develop and employ project management practices that will ensure the effective development of an outcome to completion.

- **Brief development**
  • Justify the nature of an intended outcome in relation to the issue to be resolved and justify specifications in terms of key stakeholder feedback and wider community considerations.

- **Outcome development and evaluation**
  • Critically analyse their own and others’ outcomes and evaluative practices to inform the development of ideas for feasible outcomes. Undertake a critical evaluation that is informed by ongoing experimentation and functional modelling, stakeholder feedback, and trialling in the physical and social environments. Use the information gained to select, justify, and develop an outcome. Evaluate this outcome’s fitness for purpose against the brief. Justify the evaluation, using feedback from stakeholders and demonstrating a critical understanding of the issue.

**Technological Knowledge**

Students will:

- **Technological modelling**
  • Understand how the “should” and “could” decisions in technological modelling rely on an understanding of how evidence can change in value across contexts and how different tools are used to ascertain and mitigate risk.

- **Technological products**
  • Understand the concepts and processes employed in materials evaluation and the implications of these for design, development, maintenance, and disposal of technological products.

- **Technological systems**
  • Understand the concepts of redundancy and reliability and their implications for the design, development, and maintenance of technological systems.
Level Eight  English

Listening, Reading, and Viewing

**Processes and strategies**

**Students will:**

- Integrate sources of information, processes, and strategies purposefully, confidently, and precisely to identify, form, and express increasingly sophisticated ideas.

**INDICATORS:**
- selects and reads texts for enjoyment and personal fulfillment;
- recognises, understands, and appreciates the connections between oral, written, and visual language;
- integrates sources of information and prior knowledge purposefully, confidently, and precisely to make sense of increasingly varied and complex texts;
- selects and uses appropriate processing and comprehension strategies with confidence and discrimination;
- thinks critically about texts with understanding and confidence;
- monitors, self-evaluates, and describes progress, articulating learning with confidence.

**By using these processes and strategies when listening, reading, or viewing, students will:**

**Purposes and audiences**

- Show a discriminating understanding of how texts are shaped for different purposes and audiences.

**INDICATORS:**
- recognises, understands, and appreciates how texts are constructed for a range of intentions and situations;
- identifies particular points of view within texts and understands that texts can position a reader;
- evaluates the reliability and usefulness of texts.

**Ideas**

- Show a discriminating and insightful understanding of ideas within, across, and beyond texts.

**INDICATORS:**
- makes meaning by perceptively understanding sophisticated ideas;
- makes connections by analysing, evaluating, and synthesising ideas within and between texts from a range of contexts;
- understands that there may be multiple readings available within a text;
- makes and supports inferences from texts independently.

**Language features**

- Show a discriminating and insightful understanding of how language features are used for effect within and across texts.

**INDICATORS:**
- identifies a range of sophisticated oral, written, and visual language features and understands their effects;
- uses an increasing vocabulary to make meaning;
- understands, analyses, and evaluates how text conventions work together to create meaning and effect;
- understands that authors have different voices and styles and appreciates these differences.

**Structure**

- Show a discriminating understanding of a range of structures.

**INDICATOR:**
- identifies and understands the characteristics and conventions of a range of text forms and appreciates how they contribute to and affect text meaning.

Speaking, Writing, and Presenting

**Processes and strategies**

**Students will:**

- Integrate sources of information, processes, and strategies purposefully, confidently, and precisely to identify, form, and express increasingly sophisticated ideas.

**INDICATORS:**
- uses an increasing understanding of the connections between oral, written, and visual language when creating texts;
- creates a range of increasingly coherent, varied, and complex texts by integrating sources of information and processing strategies;
- seeks feedback and makes changes to texts to improve clarity, meaning, and effect;
- is reflective about the production of own texts: monitors and self-evaluates progress, articulating learning with confidence.

**By using these processes and strategies when speaking, writing, or presenting, students will:**

**Purposes and audiences**

- Show a discriminating understanding of how to shape texts for different purposes and audiences.

**INDICATORS:**
- constructs a range of texts that demonstrate an understanding and appreciation of purpose and audience through deliberate choice of content, language, and text form;
- conveys and sustains personal voice where appropriate.

**Ideas**

- Select, develop, and communicate sustained and insightful ideas on a range of topics.

**INDICATORS:**
- develops, communicates, and sustains sophisticated ideas, information, and understandings;
- creates coherent, planned whole texts by adding details to ideas or making links to other ideas and details;
- ideas show perception, depth of thought, and awareness of a range of dimensions or viewpoints.

**Language features**

- Select, integrate, and sustain the use of a range of language features appropriately for a variety of effects.

**INDICATORS:**
- uses a wide range of oral, written, and visual language features coherently, fluently, and with control to create meaning and command attention;
- uses an increasing vocabulary to communicate precise meaning;
- uses a wide range of text conventions, including grammatical and spelling conventions, appropriately, effectively, and with accuracy.

**Structure**

- Organise texts, using a range of appropriate, coherent, and effective structures.

**INDICATOR:**
- organises and develops ideas and information for a particular purpose or effect, using the characteristics and conventions of a range of text forms with control.
# Level Eight: The Arts

## Understanding the Arts in Context

### Dance

**Students will:**
- Investigate, analyse, and discuss the features, history, issues, and development of dance in New Zealand, including the contribution of selected individuals and groups.

### Developing Practical Knowledge

- Extend and refine skills, practices, and use of technologies in a range of dance genres and styles.

### Developing Ideas

- Develop a concept and produce original dance works, using appropriate production technologies to communicate choreographic intentions.
- Record and critically reflect on the development and resolution of dance ideas.

### Communicating and Interpreting

- Select and apply rehearsal processes, performance skills, and production technologies to enhance the communication and expression of dance works.
- Critically analyse, interpret, and evaluate the artistic features and the communication of ideas in a range of dance works.

## Drama

**Students will:**
- Research, analyse, and critically evaluate how drama, including New Zealand drama, interprets, records, or challenges social and cultural discourse.

### Developing Practical Knowledge

- Research, analyse, and integrate elements, techniques, conventions, and technologies in dramatic forms for specific purposes.

### Developing Ideas

- Research, critically evaluate, and refine ideas to create original drama work.

### Communicating and Interpreting

- Analyse, rehearse, and perform works in a range of dramatic forms, assuming a variety of artistic or technical responsibilities.
- Reflect on and critically evaluate a wide range of works and performances.

## Music – Sound Arts

**Students will:**
- Research, analyse, and evaluate the production and presentation of music works from historical, social, and cultural contexts.
- Apply their understandings of the expressive qualities of music from a range of contexts to analyse its impact on their own music practices.

### Developing Practical Knowledge

- Analyse, apply, and evaluate significant expressive features and stylistic conventions and technologies in a range of music, using aural perception and practical and theoretical skills.

### Developing Ideas

- Create, structure, refine, and represent compositions and musical arrangements, using secure technical and musical skills and technologies to express imaginative thinking and personal understandings.
- Reflect on and evaluate composition processes and presentation conventions.

### Communicating and Interpreting

- Plan, rehearse, present, record, evaluate, and refine performances of music, individually and collaboratively, demonstrating interpretive thinking and personal understandings.
- Critically analyse and evaluate the expressive qualities of music and production processes in order to refine interpretations of music.

## Visual Arts

**Students will:**
- Use research and analysis to investigate contexts, meanings, intentions, and technological influences related to the making and valuing of art works.
- Research and analyse contexts relevant to their intentions and to the expression of meanings in their own work.

### Developing Practical Knowledge

- Apply understanding from broad and deep research into the characteristics and constraints of materials, techniques, technologies, and established conventions in a selected field.
- Extend and refine skills in a selected field, using appropriate processes and procedures.

### Developing Ideas

- Generate, analyse, clarify, and regenerate options in response to selected questions or a proposal in a chosen field.
- Use a systematic approach, selectively informed by recent and established practice, to develop ideas in a body of work.

### Communicating and Interpreting

- Research and analyse selected approaches and theories related to visual arts practice.
- Critically reflect on, respond to, and evaluate art works.
Health and Physical Education

Level Eight

Personal Health and Physical Development

Students will:

- **Personal growth and development**
  - Critically evaluate a range of qualitative and quantitative data to devise strategies to meet their current and future needs for well-being.

- **Regular physical activity**
  - Critically examine commercial products and programmes that promote physical activity and relate this to personal participation in programmes intended to meet their current well-being needs.

- **Safety management**
  - Critically analyse dilemmas and contemporary ethical issues that influence their own health and safety and that of other people.

- **Personal identity**
  - Critically analyse the impacts that conceptions of personal, cultural, and national identity have on people’s well-being.

Movement Concepts and Motor Skills

Students will:

- **Movement skills**
  - Devise, apply, and evaluate strategies to improve physical activity performance for themselves and others.

Positive attitudes

- Devise, apply, and appraise strategies through which they and other people can participate responsibly in challenging physical situations.

Science and technology

- Critically analyse and experience the application of scientific and technological knowledge and resources to physical activity in a range of environments.

Challenges and social and cultural factors

- Devise and apply strategies to ensure that social and cultural needs are met in personal and group physical activities.

Relationships with Other People

Students will:

- **Relationships**
  - Critically analyse the dynamics of effective relationships in a range of social contexts.

Identity, sensitivity, and respect

- Critically analyse attitudes, values, and behaviours that contribute to conflict and identify and describe ways of creating more harmonious relationships.

Interpersonal skills

- Analyse and evaluate attitudes and interpersonal skills that enable people to participate fully and effectively as community members in various situations.

Healthy Communities and Environments

Students will:

- **Societal attitudes and values**
  - Critically analyse societal attitudes and practices and legislation influencing contemporary health and sporting issues, in relation to the need to promote mentally healthy and physically safe communities.

- **Community resources**
  - Establish and justify priorities for equitable distribution of available health and recreational resources and advocate change where necessary.

- **Rights, responsibilities, and laws**
  - Demonstrate the use of health promotion strategies by implementing a plan of action to enhance the well-being of the school, community, or environment.

- **People and the environment**
  - Critically analyse the interrelationships between people, industry, technology, and legislation on aspects of environmental health.

Key Competencies

- **Thinking**
- **Using language, symbols, and texts**
- **Participating and contributing**
- **Managing self**
- **Relating to others**
In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:

**Mathematics**

- **Patterns and relationships**
  - Apply the geometry of conic sections.
  - Display and interpret the graphs of functions with the graphs of their inverse and/or reciprocal functions.
  - Use permutations and combinations.
  - Use curve fitting, log modelling, and linear programming techniques.
  - Develop network diagrams to find optimal solutions, including critical paths.

- **Equations and expressions**
  - Manipulate trigonometric expressions.
  - Form and use trigonometric, polynomial, and other non-linear equations.
  - Form and use systems of simultaneous equations, including three linear equations and three variables, and interpret the solutions in context.
  - Manipulate complex numbers and present them graphically.

- **Calculus**
  - Identify discontinuities and limits of functions.
  - Choose and apply a variety of differentiation, integration, and anti-differentiation techniques to functions and relations, using both analytical and numerical methods.
  - Form differential equations and interpret the solutions.

**Statistics**

- **Statistical investigation**
  - Carry out investigations of phenomena, using the statistical enquiry cycle:
    - conducting experiments using experimental design principles, conducting surveys, and using existing data sets;
    - finding, using, and assessing appropriate models (including linear regression for bivariate data and additive models for time-series data), seeking explanations, and making predictions;
    - using informed contextual knowledge, exploratory data analysis, and statistical inference;
    - communicating findings and evaluating all stages of the cycle.
  - Make inferences from surveys and experiments:
    - determining estimates and confidence intervals for means, proportions, and differences, recognising the relevance of the central limit theorem;
    - using methods such as resampling or randomisation to assess the strength of evidence.

- **Statistical literacy**
  - Evaluate a wide range of statistically based reports, including surveys and polls, experiments, and observational studies:
    - critiquing causal-relationship claims;
    - interpreting margins of error.

- **Probability**
  - Investigate situations that involve elements of chance:
    - calculating probabilities of independent, combined, and conditional events;
    - calculating and interpreting expected values and standard deviations of discrete random variables;
    - applying distributions such as the Poisson, binomial, and normal.
### Level Eight Science

#### Nature of Science

**Students will:**

**Understanding about science**
- Understand that scientists have an obligation to connect their new ideas to current and historical scientific knowledge and to present their findings for peer review and debate.

**Investigating in science**
- Develop and carry out investigations that extend their science knowledge, including developing their understanding of the relationship between investigations and scientific theories and models.

**Communicating in science**
- Use accepted science knowledge, vocabulary, symbols, and conventions when evaluating accounts of the natural world and consider the wider implications of the methods of communication and/or representation employed.

**Participating and contributing**
- Use relevant information to develop a coherent understanding of socio-scientific issues that concern them, to identify possible responses at both personal and societal levels.

#### Living World

**Students will:**

**Life processes, ecology, and evolution**
- Understand the relationship between organisms and their environment.
- Explore the evolutionary processes that have resulted in the diversity of life on Earth and appreciate the place and impact of humans within these processes.
- Understand how humans manipulate the transfer of genetic information from one generation to the next and make informed judgments about the social, ethical, and biological implications relating to this manipulation.

#### Planet Earth and Beyond

**Students will:**

**Earth systems and interacting systems**
- Develop an in-depth understanding of the interrelationship between human activities and the geosphere, hydrosphere, atmosphere, and biosphere over time.

**Astronomical systems**
- Explore recent astronomical events or discoveries, showing understanding of the concepts of distance and time.

#### Physical World

**Students will:**

**Physical inquiry and physics concepts**
- Investigate physical phenomena in the areas of mechanics, electricity, electromagnetism, light and waves, and atomic and nuclear physics and produce qualitative and quantitative explanations for a variety of complex situations.
- Analyse and evaluate data to deduce complex trends and relationships in physical phenomena.

**Using physics**
- Use physics ideas to explain a technological, biological, or astronomical application of physics and discuss related issues.

#### Material World

**Students will:**

**Properties and changes of matter**
- Investigate and measure the chemical and physical properties of a range of groups of substances, for example, acids and bases, oxidants and reductants, and selected organic and inorganic compounds.

**The structure of matter**
- Relate properties of matter to structure and bonding.
- Develop an understanding of and use the fundamental concepts of chemistry [for example, equilibrium and thermochemical principles] to interpret observations.

**Chemistry and society**
- Apply knowledge of chemistry to explain aspects of the natural world and how chemistry is used in society to meet needs, resolve issues, and develop new technologies.
Level Eight  Social Sciences

Students will gain knowledge, skills, and experience to:

**Social Studies**
- Understand how policy changes are influenced by and impact on the rights, roles, and responsibilities of individuals and communities.
- Understand how ideologies shape society and that individuals and groups respond differently to these beliefs.

**History**
- Understand that the causes, consequences, and explanations of historical events that are of significance to New Zealanders are complex and how and why they are contested.
- Understand how trends over time reflect social, economic, and political forces.

**Geography**
- Understand how interacting processes shape natural and cultural environments, occur at different rates and on different scales, and create spatial variations.
- Understand how people’s diverse values and perceptions influence the environmental, social, and economic decisions and responses that they make.

**Economics**
- Understand that well-functioning markets are efficient but that governments may need to intervene where markets fail to deliver efficient or equitable outcomes.
- Understand how the nature and size of the New Zealand economy is influenced by interacting internal and external factors.

Level Eight  Technology

**Technological Practice**

Students will:

**Planning for practice**
- Critically analyse their own and others’ past and current planning and management practices in order to develop and employ project management practices that will ensure the efficient development of an outcome to completion.

**Brief development**
- Justify the nature of an intended outcome in relation to the context and the issue to be resolved. Justify specifications in terms of key stakeholder feedback and wider community considerations.

**Outcome development and evaluation**
- Critically analyse their own and others’ outcomes and fitness-for-purpose determinations in order to inform the development of ideas for feasible outcomes. Undertake a critical evaluation that is informed by ongoing experimentation and functional modelling, stakeholder feedback, trialling in the physical and social environments, and an understanding of the issue as it relates to the wider context. Use the information gained to select, justify, and develop an outcome. Evaluate this outcome’s fitness for purpose against the brief. Justify the evaluation, using feedback from stakeholders and demonstrating a critical understanding of the issue that takes account of all contextual dimensions.

**Technological Knowledge**

Students will:

**Technological modelling**
- Understand the role of technological modelling as a key part of technological development, justifying its importance on moral, ethical, sustainable, cultural, political, economic, and historical grounds.

**Technological products**
- Understand the concepts and processes employed in materials development and evaluation and the implications of these for design, development, maintenance, and disposal of technological products.

**Technological systems**
- Understand operational parameters and their role in the design, development, and maintenance of technological systems.

**Nature of Technology**

Students will:

**Characteristics of technology**
- Understand the implications of technology as intervention by design and how interventions have consequences, known and unknown, intended and unintended.

**Characteristics of technological outcomes**
- Understand how technological outcomes can be interpreted and justified as fit for purpose in their historical, cultural, social, and geographical locations.
Learning Languages

Levels One and Two

Proficiency Descriptor

Students can understand and use familiar expressions and everyday vocabulary. Students can interact in a simple way in supported situations. (Adapted from Common European Framework for Languages, Global Scale Level A1: Basic User; Council of Europe, 2001.)

Communication

In selected linguistic and sociocultural contexts, students will:

Selecting and using language, symbols, and texts to communicate
- Receive and produce information.

Managing self and relating to others
- Produce and respond to questions and requests.

Participating and contributing in communities
- Show social awareness when interacting with others.

Language Knowledge

Students will:
- Recognise that the target language is organised in particular ways.
- Make connections with their own language(s).

Cultural Knowledge

Students will:
- Recognise that the target culture(s) is (are) organised in particular ways.
- Make connections with known culture(s).

Levels Three and Four

Proficiency Descriptor

Students can understand and construct simple texts using their knowledge of the target language. Students can describe aspects of their own background and immediate environment. (Adapted from Common European Framework for Languages, Global Scale Level A1: Basic User; Council of Europe, 2001.)

Communication

In selected linguistic and sociocultural contexts, students will:

Selecting and using language, symbols, and texts to communicate
- Understand and produce information and ideas.

Managing self and relating to others
- Express and respond to personal needs and interests.

Participating and contributing in communities
- Use cultural knowledge to communicate appropriately.

Language Knowledge

Students will:
- Recognise and describe ways in which the target language is organised.
- Compare and contrast languages.

Cultural Knowledge

Students will:
- Recognise and describe ways in which the target culture(s) is (are) organised.
- Compare and contrast cultural practices.

Key Competencies

- Thinking
- Using language, symbols, and texts
- Managing self
- Relating to others
- Participating and contributing
Levels Five and Six

Learning Languages

Proficiency Descriptor
Students can understand and produce more complex language. They can communicate beyond the immediate context, for example, past and future events. Students can understand and produce a variety of text types. (Adapted from Common European Framework for Languages, Global Scale Level A2: Strong Waysstage Performance; Council of Europe, 2001.)

Communication
In selected linguistic and sociocultural contexts, students will:

Selecting and using language, symbols, and texts to communicate
• Communicate information, ideas, and opinions through different text types.

Managing self and relating to others
• Express and respond to personal ideas and opinions.

Participating and contributing in communities
• Communicate appropriately in different situations.

Language Knowledge
Students will:
• Understand ways in which the target language is organised for different purposes.

Cultural Knowledge
Students will:
• Understand ways in which the target culture(s) is (are) organised for different purposes.

Levels Seven and Eight

Learning Languages

Proficiency Descriptor
Students can use language variably and effectively to express and justify their own ideas and opinions, and support or challenge those of others. They are able to use and identify the linguistic and cultural forms that guide interpretation and enable them to respond critically to texts. (Adapted from Common European Framework for Languages, Global Scale Level B1: Independent User; Council of Europe, 2001.)

Communication
In selected linguistic and sociocultural contexts, students will:

Selecting and using language, symbols, and texts to communicate
• Communicate information, ideas, and opinions through increasingly complex and varied texts.

Managing self and relating to others
• Explore the views of others, developing and sharing personal perspectives.

Participating and contributing in communities
• Engage in sustained interaction and produce extended text.

Language Knowledge
Students will:
• Analyse ways in which the target language is organised in different texts and for different purposes.
• Explore how linguistic meaning is conveyed across languages.

Cultural Knowledge
Students will:
• Analyse ways in which the target culture(s) is (are) organised for different purposes and for different audiences.
• Analyse how the use of the target language expresses cultural meanings.