Numeracy
1. What is Numeracy? .................................................................................................. 3
2. Why is Numeracy important? ..............................................................................3
3. How is Numeracy addressed at Murrumba State Secondary College?
   In the Maths classroom .................................................................................. 4
   Across the college ...........................................................................................4
4. How can you support your child? ......................................................................5
5. What if your child is having difficulty? ..............................................................5
6. Useful websites .........................................................................................................6
7. Quick reference guides – Numeracy
   a. Maths vocabulary ...................................................................................6
   b. Problem solving strategies ..................................................................8
   c. Symbols, abbreviations and definitions ............................................10
   d. Metric and non-metric conversions ..................................................12
   e. Perimeter, area, surface area and volume formulas .................14

Literacy
1. Why is Literacy important? .................................................................................15
2. How Literacy is addressed at Murrumba State Secondary College?
   In the English classroom .............................................................................15
   Across the college .........................................................................................16
3. How can you support your child?
   Strategies to teach children to spell .......................................................16
   Strategies to teach comprehension ........................................................17
4. Where can you get more information? ..........................................................19
5. Quick reference guides – Literacy
   a. Latin abbreviations............................................................................... 19
   b. Commonly confused words ..............................................................21
   c. Punctuation rules ..................................................................................22
   d. Grammar rules .......................................................................................24
   e. Spelling rules ..........................................................................................26
   f. Prefixes and suffixes .............................................................................27
   g. Essential literacy terms .......................................................................28

Academic Skills
1. Common curriculum elements .........................................................................38
2. Referencing and bibliographies ........................................................................42
3. 10 tips for effective study ..................................................................................45

Appendix
Literacy and Numeracy Fact Sheet – What is numeracy? ..............................47
Literacy and Numeracy Fact Sheet – What is literacy? .....................................48
Numeracy Fact Sheet – Supporting your child in years 4 to 9 ....................49
Literacy Fact Sheet – Supporting your child in years 4 to 9 .........................51
NUMERACY

What is numeracy?

To be numerate is to use mathematics effectively to meet the general demands of life at home, in paid work, and for participation in community and civic life.

Numeracy is “...the combination of mathematical knowledge, problem solving and communication skills required by all persons to function successfully within our technological world. Numeracy is more than knowing about numbers and number operations.” (British Columbia Association of Mathematics Teachers, 1998)

Numerate students can deal with numbers and measures confidently and competently. They can compute on paper, in their heads, and by using technology. They can estimate and solve problems in a variety of situations. They also understand how information is gathered by counting and measuring and how it is presented in graphs, diagrams, charts, and tables.

Why is numeracy important?

Literacy and numeracy are important foundations for all learning in school.

A capacity for numerate behaviour is important for all school students for ongoing education, employment, private and civic adult lives.

Numeracy is a life skill. Proficiency in the basic skills of numeracy is not enough: what is needed is the ability to apply these skills to real-life practical problems. For example:

Developing financial competency (e.g. tax, credit cards, etc)
  • Reading timetables and maps
  • The increased need to make complex financial arrangements
  • Being aware of rights in part time employment
  • Financial awareness to prevent debt and exploitation
  • Interpreting statistical claims made by the media, industry and government

To be successful in school, the workplace, and community, students must become numerate. To be numerate means that students:

  • know basic number facts
  • estimate values and make mental calculations
  • use mathematics comfortably in their studies
  • figure out numerical information from graphs and charts
  • become effective problem solvers
  • use technology appropriately to solve problems
How is Numeracy addressed at Murrumba State Secondary College?

In the Maths classroom

Students in the college are not streamed by their ability for Mathematics. Each classroom teacher delivers a differentiated programme of work based on the individual needs of each student in the class.

In the Junior Secondary Mathematics faculty, National Curriculum Mathematics is taught for 3 lessons per week and a focused Numeracy skill lesson is taught once per week. These skills range from mental computation, to calculator skills, NAPLAN style questions as well as various other mathematical concepts. Numeracy lesson starters are also featured in all other subject areas once per week based on the previous weeks focused Numeracy skill.

Weekly maths homework in the junior school also has a combination of literacy, numeracy and ICT skills, along with work relating to the course at that point in time.

Maths Resources

The resource package used by the college is the Pearson Mathematics series. Students must have paid the Student Resource Scheme to access these resources. This package contains the texts - Student Book and Homework Program, as well as online resources. The student book will remain at school; however the students will have access to a pdf version of the text via the school’s website and the Pearson website. The Pearson website is also a rich source of information, activities and games for students to use, not only in the classroom, but also at home.

http://etx.pearsonplaces.com.au

Once part of the Student Resource Scheme, your student will be given a username and password for the Pearson website (listed above). This will enable the student to access the Pearson places web resources. These resources include maths tutorials, interactives, drill worksheets, self-correcting quizzes and games all designed to complement the learning occurring in the classroom.

Across the college

The curriculum in all subjects supports the following processes that foster numeracy:

- developing positive attitudes
- estimating and doing mental mathematics
- problem solving
- communicating mathematically
- connecting and applying mathematical ideas
- reasoning mathematically
- using technology

Many subjects across the school will develop specific numeracy skills in relevant areas of their curriculum eg:

- art (transformations, symmetry, ratio, scale)
• health and physical education (timekeeping, measuring heart rate and body fat)
• science (conversions of units, accurate measuring, graphing, measuring angles)
• SOSE (graphs, population density, maps and scales, reading pie charts).

Many subject areas across the school will start at least one lesson per week focusing on numeracy skills such as mental computation, calculator work or other subject specific numeracy demands. Teachers have contextualised the activity as appropriate so students are still engaged with subject specific material, while developing and enhancing their numeracy skills.

How can you support your child?
When the home and school work together, young people have increased opportunities to gain the numeracy skills necessary for success in school and beyond. Here are some suggestions for you to help your child meet with success in mathematics:

• Share a positive attitude towards mathematics. You can make it fun by playing board games together, solving puzzles and brain teasers.
• Have high expectations for your student’s achievement and effort in maths.
• Meet with the mathematics teacher to see if your child is actively involved in mathematics.
• Make sure that your child is challenged and encourage his or her interest and pursuit of mathematics.
• Provide a quiet study area for your child.
• Encourage your child to keep a regular study schedule.
• Help your child see that mathematics is very much a part of everyday life and that many jobs require mathematics.
• Encourage your child to use calculators and computers appropriately.
• Learn about maths related careers and help your student understand that maths they take now and the results they achieve can affect their future choices.

Homework causes trouble in many households. Avoid the temptation to take over for your child. Think of yourself as more of a guide than a teacher. Doing your student’s homework encourages them to give up easily. The best thing you can do is ask them questions. Sometimes just explaining something out loud will help your student work out what to do on their own.

What if your child is having difficulty?
Begin in the first instance by talking with your child’s teacher, as they will have the most specific, up to date knowledge on the progress of your child. Additionally, the leader of learning, guidance officer, or the relevant deputy principal are further points of contact to discuss any issues.

Ask questions such as:
• What are the mathematics and numeracy skills that my child is expected to learn?
• What is the difficulty my child is having?
• Is my child in the appropriate program? Should my child be assessed to see if he or she has special learning needs which may require additional support?
• What additional help is available in the school?
• What can be done at home to help?

Work out a plan that considers how your child learns, his or her personal and career goals, and the kind of support needed at home and at school.

Some useful websites:
http://www.coolmath4kids.com/
http://www.mathsisfun.com/index.htm
http://illuminations.nctm.org/ActivitySearch.aspx
http://www.math.com/school/glossary/glossindex.html
Tips for parents to help their students with different maths topics:

Quick Reference Guides
Maths Vocabulary

Some commonly used terms and definitions:

account for - a statement of reasons, causes, etc., explaining some event.
draw (cf. sketch) - to sketch (someone or something) in lines or words; delineate; depict: to draw a vase with charcoal; to draw the comedy’s characters with skill.
illustrate/exemplify - to furnish or serve as an example of: The plays of Wilde exemplify the comedy of manners.
show (calculations) - to prove; demonstrate: His experiment showed the falsity of the theory.
approximate - to estimate: We approximated the distance at three miles.
estimate - to form an approximate judgment or opinion regarding the worth, amount, size, weight, etc., of; calculate approximately: to estimate the cost of a college education.
indicate - to point out or point to; direct attention to: to indicate a place on a map.
sketch (cf. draw) - a simply or hastily executed drawing or painting, esp. a preliminary one, giving the essential features without the details.
argue - to present reasons for or against a thing: He argued in favour of capital punishment.
evaluate - Mathematics. to ascertain the numerical value of (a function, relation, etc.).
justify - to show (an act, claim, statement, etc.) to be just or right: The end does not always justify the means.
state - to declare definitely or specifically: She stated her position on the case.
comment on - a remark, observation, or criticism: a comment about the weather.
explain - to make plain or clear; render understandable or intelligible: to explain an obscure point.

list - a series of names or other items written or printed together in a meaningful grouping or sequence so as to constitute a record: a list of members.

substitute in - to take the place of; replace.

compare - to examine (two or more objects, ideas, people, etc.) in order to note similarities and differences: to compare two pieces of cloth; to compare the governments of two nations.

expound - to explain; interpret.

outline (in words) - to give an outline of; sketch the main features of: On the first day, the professor just outlined the course for us.

suggest - to propose (a person or thing) as suitable or possible for some purpose: We suggested him for president.

contrast - to compare in order to show unlikeness or differences; note the opposite natures, purposes, etc., of: Contrast the political rights of Romans and Greeks.

express - to put (thought) into words; utter or state: to express an idea clearly.

summarise - to make a summary of; state or express in a concise form.

derive - to reach or obtain by reasoning; deduce; infer.

extrapolate - Statistics. to estimate (the value of a variable) outside the tabulated or observed range.

prove - Mathematics. to verify the correctness or validity of by mathematical demonstration or arithmetical proof.

transcribe - to make an exact copy of (a document, text, etc.).

describe - to tell or depict in written or spoken words; give an account of: He described the accident very carefully.

rank - to assign to a particular position, station, class, etc.: She was ranked among the most admired citizens.

verify - to prove the truth of, as by evidence or testimony; confirm; substantiate: Events verified his prediction.

determine - to settle or decide (a dispute, question, etc.) by an authoritative or conclusive decision.

generalise - to infer (a general principle, trend, etc.) from particular facts, statistics, or the like.

discuss - to consider or examine by argument, comment, etc.; talk over or write about, esp. to explore solutions; debate: to discuss the proposed law on taxes.
identify - to recognize or establish as being a particular person or thing; verify the identity of: to identify handwriting; to identify the bearer of a check.

quote - to repeat (a passage, phrase, etc.) from a book, speech, or the like, as by way of authority, illustration, etc.

Problem Solving

Strategies for Mathematical investigation and Problem Solving

Create a table, then look for a pattern or a result
A table is a way of organising or grouping numbers. You should consider the number of rows and columns that will be needed and label them appropriately. A well-designed table helps you to see any patterns or results in the numbers you have organised, and also demonstrates to others how you were able to arrive at your solution. There are many different ways of presenting information in a table.

Draw a diagram, then look for a pattern or a result
When information is represented in the form of a diagram, it can be easier to study all the information at once. There are many types of diagrams, so no single diagram is necessarily the best.

Use a pattern of numbers, making use of technology such as a computer spreadsheet
Repetitive tasks are well suited to spreadsheets because once a spreadsheet is set up; the repetitive tasks are achieved in an instant. A spreadsheet can list patterns of numbers from which a result can be found.

Work backwards from the answer
If there is a sequence of steps for which we know the final result, then a useful strategy may be to work backwards from this final result or answer. We start with the last step of the sequence.

Use a process of elimination
When using a process of elimination we remove or eliminate possible solutions that do not match the given information. We first write down all the possible combinations or solutions in a grid or table. From the information supplied, we cross out (eliminate) those combinations that do not match.

Look at similar but simpler problems
If you are overwhelmed by the size of the numbers involved in a question, try to solve a similar but simpler question. This can be achieved by changing the numbers in the original question to smaller numbers. After finding the answer to the simpler question, the same method can be used to solve the original problem.
Use trial and error (guess and check), making use of technology such as a computer spreadsheet

Sometimes it may not be easy to solve a problem directly; in this case we can use a strategy by which we guess at the solution. We test this value (guess), using the available information supplied in the problem, to check whether it is the solution. Even if it is not the solution to the problem, this process provides us with further information that we can use to try another, better-informed guess.

We can continue to guess and check until we reach the solution. Since this can be a lengthy process, we can use technology such as a spreadsheet to provide instant feedback on our checking.
# Symbols, Abbreviations and Definitions

## General symbols and abbreviations

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\equiv$</td>
<td>is equal to</td>
</tr>
<tr>
<td>$\neq$</td>
<td>is not equal to</td>
</tr>
<tr>
<td>$\approx$</td>
<td>is approximately equal to</td>
</tr>
<tr>
<td>$\perp$</td>
<td>perpendicular</td>
</tr>
<tr>
<td>$\parallel$</td>
<td>parallel</td>
</tr>
<tr>
<td>$\pi$</td>
<td>pi (approximately 3.141 593)</td>
</tr>
<tr>
<td>$\leq$</td>
<td>less than or equal to</td>
</tr>
<tr>
<td>$\geq$</td>
<td>greater than or equal to</td>
</tr>
<tr>
<td>$\angle$</td>
<td>angle</td>
</tr>
<tr>
<td>$\sqrt{}$</td>
<td>square root</td>
</tr>
<tr>
<td>$%$</td>
<td>percentage</td>
</tr>
<tr>
<td>$2.3\pi$</td>
<td>2.3 radians</td>
</tr>
<tr>
<td>$\therefore$</td>
<td>therefore</td>
</tr>
<tr>
<td>$T$</td>
<td>period</td>
</tr>
<tr>
<td>$\Sigma$</td>
<td>summation</td>
</tr>
<tr>
<td>$Q_3$</td>
<td>3rd quartile</td>
</tr>
<tr>
<td>$P_{97}$</td>
<td>87th percentile</td>
</tr>
<tr>
<td>$D_6$</td>
<td>6th decile</td>
</tr>
<tr>
<td>$\bar{x}$</td>
<td>mean of $x$ values</td>
</tr>
<tr>
<td>$\propto$</td>
<td>proportional to</td>
</tr>
<tr>
<td>$\therefore$</td>
<td>implies</td>
</tr>
<tr>
<td>$\Leftrightarrow$</td>
<td>if and only if</td>
</tr>
<tr>
<td>$\cap$</td>
<td>intersection</td>
</tr>
<tr>
<td>$\cup$</td>
<td>union</td>
</tr>
<tr>
<td>$\emptyset$</td>
<td>null set</td>
</tr>
<tr>
<td>$\text{LCD}$</td>
<td>lowest common denominator</td>
</tr>
<tr>
<td>$\text{QED}$</td>
<td>quod erat demonstrandum (completion of proof)</td>
</tr>
<tr>
<td>$\log$</td>
<td>common logarithm</td>
</tr>
<tr>
<td>$\log_a x$</td>
<td>logarithm of $x$ to the base $a$</td>
</tr>
<tr>
<td>$\log_e x$</td>
<td>natural logarithm of $x$</td>
</tr>
<tr>
<td>$e^x$</td>
<td>the exponential function</td>
</tr>
<tr>
<td>$\sigma$</td>
<td>standard deviation</td>
</tr>
<tr>
<td>$\mu$</td>
<td>expected value of random variable $X$</td>
</tr>
<tr>
<td>$\mu(X)$</td>
<td>expected value of random variable $X$</td>
</tr>
<tr>
<td>$\text{P}(X)$</td>
<td>probability function of random variable $X$</td>
</tr>
<tr>
<td>$\text{P}(x)$</td>
<td>probability function of random variable $x$</td>
</tr>
<tr>
<td>$\mu$, $E(X)$</td>
<td>expected value of random variable $X$</td>
</tr>
<tr>
<td>$\text{SD}(X)$</td>
<td>standard deviation of random variable $X$</td>
</tr>
<tr>
<td>$\sum_{i=0}^{n}$</td>
<td>sum of values from 0 to $n$</td>
</tr>
<tr>
<td>$E'$</td>
<td>complement of $E$</td>
</tr>
<tr>
<td>$\text{MSSC}$</td>
<td>with respect to</td>
</tr>
</tbody>
</table>
### Greek Alphabet

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Letter</th>
<th>Greek Letter</th>
<th>English</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Α α</td>
<td>alpha</td>
<td>α</td>
<td>Alpha</td>
<td>alpha</td>
</tr>
<tr>
<td>Β β</td>
<td>beta</td>
<td>β</td>
<td>Beta</td>
<td>beta</td>
</tr>
<tr>
<td>Γ γ</td>
<td>gamma</td>
<td>γ</td>
<td>Gamma</td>
<td>gamma</td>
</tr>
<tr>
<td>Δ δ</td>
<td>delta</td>
<td>δ</td>
<td>Delta</td>
<td>delta</td>
</tr>
<tr>
<td>Ε ε</td>
<td>epsilon</td>
<td>ε</td>
<td>Epsilon</td>
<td>epsilon</td>
</tr>
<tr>
<td>Ζ ζ</td>
<td>zeta</td>
<td>ζ</td>
<td>Zeta</td>
<td>zeta</td>
</tr>
<tr>
<td>H η</td>
<td>eta</td>
<td>η</td>
<td>Eta</td>
<td>eta</td>
</tr>
<tr>
<td>Θ θ</td>
<td>theta</td>
<td>θ</td>
<td>Theta</td>
<td>theta</td>
</tr>
<tr>
<td>Ι ι</td>
<td>iota</td>
<td>ι</td>
<td>Iota</td>
<td>iota</td>
</tr>
<tr>
<td>Κ κ</td>
<td>kappa</td>
<td>κ</td>
<td>Kappa</td>
<td>kappa</td>
</tr>
<tr>
<td>Λ λ</td>
<td>lambda</td>
<td>λ</td>
<td>Lambda</td>
<td>lambda</td>
</tr>
<tr>
<td>Μ μ</td>
<td>mu</td>
<td>μ</td>
<td>Mu</td>
<td>mu</td>
</tr>
<tr>
<td>Ν ν</td>
<td>nu</td>
<td>ν</td>
<td>Nu</td>
<td>nu</td>
</tr>
<tr>
<td>Ξ ξ</td>
<td>xi</td>
<td>ξ</td>
<td>Xi</td>
<td>xi</td>
</tr>
<tr>
<td>Ο ο</td>
<td>omicron</td>
<td>ο</td>
<td>Omicron</td>
<td>omicron</td>
</tr>
<tr>
<td>Π π</td>
<td>pi</td>
<td>π</td>
<td>Pi</td>
<td>pi</td>
</tr>
<tr>
<td>Ρ ρ</td>
<td>rho</td>
<td>ρ</td>
<td>Rho</td>
<td>rho</td>
</tr>
<tr>
<td>Σ σ</td>
<td>sigma</td>
<td>σ</td>
<td>Sigma</td>
<td>sigma</td>
</tr>
<tr>
<td>Τ τ</td>
<td>tau</td>
<td>τ</td>
<td>Tau</td>
<td>tau</td>
</tr>
<tr>
<td>Υ υ</td>
<td>upsilon</td>
<td>υ</td>
<td>Upsilon</td>
<td>upsilon</td>
</tr>
<tr>
<td>Φ φ</td>
<td>phi</td>
<td>φ</td>
<td>Phi</td>
<td>phi</td>
</tr>
<tr>
<td>Χ χ</td>
<td>chi</td>
<td>χ</td>
<td>Chi</td>
<td>chi</td>
</tr>
<tr>
<td>Ψ ψ</td>
<td>psi</td>
<td>ψ</td>
<td>Psi</td>
<td>psi</td>
</tr>
<tr>
<td>Ω ω</td>
<td>omega</td>
<td>ω</td>
<td>Omega</td>
<td>omega</td>
</tr>
</tbody>
</table>

### Roman Numerals

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1 (one) (unus)</td>
</tr>
<tr>
<td>V</td>
<td>5 (five) (quinque)</td>
</tr>
<tr>
<td>X</td>
<td>10 (ten) (decem)</td>
</tr>
<tr>
<td>L</td>
<td>50 (fifty) (quinquaginta)</td>
</tr>
<tr>
<td>C</td>
<td>100 (one hundred) (centum)</td>
</tr>
<tr>
<td>D</td>
<td>500 (five hundred) (quingenti)</td>
</tr>
<tr>
<td>M</td>
<td>1000 (one thousand) (mille)</td>
</tr>
</tbody>
</table>

**Example:**

- 1640 in roman numerals is MDCXL
- 789 in roman numerals is DCCLXXXIX
- 1990 in roman numerals is MCMXC
Metric system prefixes

<table>
<thead>
<tr>
<th>Prefix (number)</th>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tera- (trillion)</td>
<td>T</td>
<td>( \times 10^{12} )</td>
</tr>
<tr>
<td>giga- (billion)</td>
<td>G</td>
<td>( \times 10^9 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer memory: ( \times 1 073 741 824 = 2^{30} )</td>
</tr>
<tr>
<td>mega- (million)</td>
<td>M</td>
<td>( \times 10^6 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer memory: ( \times 1 048 576 = 2^{20} )</td>
</tr>
<tr>
<td>kilo- (thousand)</td>
<td>k</td>
<td>( \times 10^3 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer memory: ( \times 1024 = 2^{10} )</td>
</tr>
<tr>
<td>hecto- (hundred)</td>
<td>h</td>
<td>( \times 100 = 10^2 )</td>
</tr>
<tr>
<td>deka- (ten)</td>
<td>da</td>
<td>( \times 10 )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 unit</td>
</tr>
<tr>
<td>deci- (tenth)</td>
<td>d</td>
<td>( \div 10 = \times 10^{-1} )</td>
</tr>
<tr>
<td>centi- (hundredth)</td>
<td>c</td>
<td>( \div 100 = \times 10^{-2} )</td>
</tr>
<tr>
<td>milli- (thousandth)</td>
<td>m</td>
<td>( \div 1000 = \times 10^{-3} )</td>
</tr>
<tr>
<td>micro- (millionth)</td>
<td>( \mu )</td>
<td>( \div 1 000 000 = \times 10^{-6} )</td>
</tr>
<tr>
<td>nano- (billionth)</td>
<td>n</td>
<td>( \div 1 000 000 000 = \times 10^{-9} )</td>
</tr>
<tr>
<td>pico- (trillionth)</td>
<td>P</td>
<td>( \div 1 000 000 000 000 = \times 10^{-12} )</td>
</tr>
</tbody>
</table>

Non-metric conversions

1 pound = 0.453 592 37 kg ≈ 0.454 kg
1 US ton = 2000 pounds ≈ 907 kg
1 carat (mass of gem) = 200 mg
1 inch = 25.4 mm
1 mile ≈ 1.609 km
1 nautical mile ≈ 1.852 km
1 US gallon = 3.785 L
1 teaspoon = 5 mL
1 tablespoon = 15 mL (or sometimes 20 mL)
1 cup = 250 mL

1 atmosphere (pressure) ≈ 101.3 kilopascals (kPa) = 1013 hectopascals (hPa)
1 millibar (pressure) = 1 hectopascal
1 psi (pound/square inch) = 6.895 kilopascals
1 acre ≈ 0.405 hectares (ha)
1 horsepower ≈ 745.7 watts (W)
1 calorie = 4186 joules (J)
1 dietary Calorie = 1 kilocalorie ≈ 4186 joules = 4.186 kJ
1 kilowatt-hour (electrical power) = 3 600 000 joules

Special metric units

1 metric tonne (t) = 1000 kg
1 hectare (ha) = 10 000 m²
1 litre (L) = 1000 cm³
1 mL = 1 cm³

For gold, carats refer to the proportion of gold. 24 carat is pure gold.

Thus 18 carat = \( \frac{18}{24} = \frac{3}{2} \) gold.

It is not the same as the carat used for diamonds and other gems (above).
Volume and Capacity
The volume of a three-dimensional object is the amount of space it occupies. Capacity is a term that is commonly used to describe the quantity of liquids or gases.

\[
1 \text{ cm}^3 = 1 \text{ mL} \\
1000 \text{ cm}^3 = 1 \text{ L}
\]
**Perimeter, Area, Surface Area and Volume**

**Rectangle**
- Area = Length X Width
  \[ A = lw \]
- Perimeter = 2 X Lengths + 2 X Widths
  \[ P = 2l + 2w \]

**Parallelogram**
- Area = Base X Height
  \[ a = bh \]

**Triangle**
- Area = 1/2 of the base X the height
  \[ a = \frac{1}{2} bh \]
- Perimeter = \( a + b + c \) (add the length of the three sides)

**Trapezoid**
- \( A = \frac{(b_1 + b_2)h}{2} \)
- Perimeter = area + \( b_1 + b_2 + c \)
  \[ P = a + b_1 + b_2 + c \]

**Rectangle Solid**
- Volume = Length X Width X Height
  \[ V = lwh \]
- Surface Area = 2lw + 2lh + 2wh

**Prism**
- Volume = Base X Height
  \[ v = bh \]
- Surface Area = 2b + Ph (b is the area of the base P is the perimeter of the base)

**Cylinder**
- Volume = \( \pi r^2 \) x height
  \[ V = \pi r^2 h \]
- Surface Area = \( 2\pi r h + 2\pi r^2 \)
  \[ S = 2\pi rh + 2\pi r^2 \]

**Pyramid**
- \[ V = \frac{1}{3} bh \]
- \( b \) is the area of the base

**Cone**
- Volume = \( \frac{1}{3} \pi r^2 \) x height
  \[ V = \frac{1}{3} \pi r^2 h \]
- Surface Area = \( \pi r^2 + \pi rs \)
  \[ S = \pi r^2 + \pi rs \]

**Sphere**
- Volume = \( \frac{4}{3} \pi r^3 \)
  \[ V = \frac{4}{3} \pi r^3 \]
- Surface Area = \( 4\pi r^2 \)
  \[ S = 4\pi r^2 \]
LITERACY

What is literacy?

Literacy is “the ability to read and write, and to use written information appropriately in a range of contexts. Literacy involves the integration of reading and writing with speaking, listening, viewing and critical thinking. Literacy also includes a person’s cultural knowledge, which enables them to recognise and use language that is appropriate to different social situations.” (Department of Education, Training and Employment).

Why is Literacy important?

Literacy is the key to learning in all learning areas and is essential for students’ lifelong learning. Literacy is vital for success in school, the workplace and the community. Students must be literate to navigate their everyday world. For example:

- Following instructions
- Reading a timetable
- Filling out forms
- Writing a note.

Literacy also promotes the use of higher order thinking skills such as being able to critically question texts. Literacy practices and demands change over time. As students experience new situations they need to continually adapt and extend their literacy skills.

How is Literacy addressed at Murrumba State Secondary College?

In the English classroom

Students in the College are not streamed by their ability. Each classroom teacher delivers a differentiated programme of work based on the individual needs of each student in the class.

In English, each teacher dedicates one lesson a week to a literacy focus. Literacy skills taught in this lesson include:

- Reading comprehension
- Writing
- Spelling
- Grammar and punctuation

Resources used in the classroom to support the teaching of literacy include the Pearson English textbook and the Pearson English student activity book.
Across the College

The curriculum in all subjects supports the development of literacy skills. All subject areas across the College start at least one lesson per week focusing on literacy skills such as spelling, grammar and punctuation, reading comprehension and writing.

How can you support your child?

Research has shown that children’s motivation and achievement improve when their parents or carers are involved in their education. There are many everyday things you can do to encourage literacy learning. These include:

• Sharing your knowledge and explaining how you use literacy in your everyday life
• Encouraging your child to read and view a variety of texts such as newspapers, novels, comics, magazines, websites, email, timetables, instructions and recipes
• Encouraging your child to write and design for a variety of purposes using print and electronic resources — invitations, thank you notes, shopping lists, messages, journals and electronic slide shows
• Encouraging your child to speak and listen for a variety of purposes — sharing a joke, giving instructions or asking for information
• Sharing a love of language
• Discussing how texts look different depending on the purpose and audience — for example, text messaging uses different spelling from school projects
• Talking about things that you have read or viewed that were amusing, interesting or useful
• Discussing favourite authors, producers, directors or illustrators and what you like about them
• Discussing new and unusual words or phrases and exploring these through print and electronic dictionaries
• Playing games that develop knowledge and enjoyment of words
• Making use of community resources for information, local and school libraries, clubs, community groups and websites.

Strategies to teach children to spell:

One of the strategies used to assist students to learn to spell is the following;

LOOK. Get the student to look at the word; encourage them to see blends or letter groups they know; break the word up into syllables or chunks.

SAY. Get the student to say the word (maybe as they would sound it out)

COVER. Cover the word with paper or another book. Get the student to picture the word in their mind.

WRITE. Get the student to write the word out on paper or in a book.

CHECK. Get the student to check their word against the original word.
Strategies to help you remember how to spell a word:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Look, say, cover, write, check.</td>
</tr>
<tr>
<td>2</td>
<td>‘Chunking’ words - syllabification.</td>
</tr>
<tr>
<td>3</td>
<td>‘Chunking’ words - compound words and words within words.</td>
</tr>
<tr>
<td>4</td>
<td>‘Chunking’ words - letter group.</td>
</tr>
<tr>
<td>5</td>
<td>Concentrating on the hard part - highlighting the difficult part of the word.</td>
</tr>
<tr>
<td>6</td>
<td>Memory helpers of ‘mnemonics’.</td>
</tr>
</tbody>
</table>

Strategies to work out the spelling of a word you don’t know:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Use rules.</td>
</tr>
<tr>
<td>8</td>
<td>Use letter sounds/pronunciation.</td>
</tr>
<tr>
<td>9</td>
<td>Use knowledge of word history and meaning.</td>
</tr>
<tr>
<td>10</td>
<td>Use a dictionary.</td>
</tr>
<tr>
<td>11</td>
<td>Use a spell checker.</td>
</tr>
<tr>
<td>12</td>
<td>Have a go! Does it look right?</td>
</tr>
<tr>
<td>13</td>
<td>Ask someone.</td>
</tr>
</tbody>
</table>

Strategies to teach children how to comprehend text:

Understanding what they are reading can be a complex process for students. The following are some strategies to use and questions to ask when reading texts:

- **Finding Main Idea**
  The main idea of a reading passage is a sentence that tells what the passage is mostly about. Questions about main idea might ask you to find what a passage is mostly about or mainly about. The questions might also ask you to choose the best title for a passage. When answering a question about main idea, ask yourself, What is the passage mostly about? Then choose your answer.

- **Recalling Facts and Details**
  Every reading passage contains facts and details. The facts and details tell more about the main idea. Questions about facts and details ask you about something that was stated in the passage. To answer a question about a fact or detail, look back to the passage to find the answer.

- **Understanding Sequence**
  Sometimes, a passage is told in order, or sequence. Different things happen at the beginning, middle, and ending of a passage. Questions about sequence talk ask you to remember and put events or details in order. Questions about sequence often contain key words such as first, then, last, after, or before.
• **Recognising Cause and Effect**
  A cause is something that happens. An effect is something that happens because of the cause. Read this sentence: ‘I forgot to set my alarm clock, so I was late for school.’ The cause of being late for school was forgetting to set the alarm clock. The effect of forgetting to set the alarm clock is being late for school. Questions about cause and effect usually begin with the key words why, what happened, or because.

• **Comparing and Contrasting**
  Some questions ask you to find how two things are alike or different. This is called comparing and contrasting, or finding likenesses and differences. Questions that ask you to compare or contrast usually contain key words such as most like, different, alike, or similar.

• **Making Predictions**
  A prediction is something you think will happen in the future. Questions about predictions ask what will probably or most likely happen next. You will not find the answer to these questions in the passage. But there are clues you can use from the passage to make a good guess about what might happen next.

• **Finding Word Meaning in Context**
  Sometimes when you read, you find a word whose meaning you do not know. Often you can tell the meaning of the word by the way the word is used in the sentence. This is called understanding word meaning in context. Questions about meaning in context ask you to find the meaning of a word that may not be familiar to you. If you have trouble choosing an answer for a question like this, try each answer choice in the sentence where the word appears in the passage. See which answer choice makes the most sense.

• **Drawing Conclusions and Making Inferences**
  When you read, many times you must figure out things on your own. The author doesn’t always tell you everything. For example, you might read these sentences: ‘The moon cast an eerie glow in Jake’s room. Suddenly, he saw a shadow by the window. Jake sat up in bed, frozen with fear.’ From what the author has written, you can tell that it is probably night-time, because the moon is out and Jake is in bed. Questions about drawing conclusions often contain the key words you can tell or probably.

• **Distinguishing Between Fact and Opinion**
  Questions about facts and opinions ask you to find which statements are fact statements and which statements are opinion statements. Remember, a fact is something that is true. An opinion tells how a person feels about something. Facts can be proven. Opinions cannot. Statements that are opinions often contain key words such as most, best, nicest and greatest.

• **Identifying Author’s Purpose**
  Questions about author’s purpose ask you why the author wrote the passage. Most authors write for one of these reasons: to persuade (make someone want to do something), to give information, to describe, or to entertain. You can remember these four reasons by remembering P.I.D.E. – P for persuade, I for information, D for description, and E for entertain.
**Interpreting Figurative Language**

Sometimes, writers use words in such a way that their meaning is different from their usual meaning. For example, someone who has told a secret might say, ‘I spilled the beans.’ This is an example of figurative language. These words do not mean that the person actually spilled some beans. These words mean ‘I didn’t mean to tell the secret.’

**Summarising**

Questions about the best summary of a passage ask you about the main points of the passage. When you answer questions about summary, first ask yourself, What is the main idea of the passage? A good summary is closer to the main idea than to any single detail found in the passage.

**Where can you get more information?**

**College:**
- Leaders of Learning – Mathematics and English/Humanities – (07) 3490 3222
- Your child’s classroom Mathematics or English Teacher – (07) 3490 3222
- College Guidance Officer – (07) 3490 3222

**Internet:**
- NAPLAN website - http://www.naplan.edu.au/

**Quick Reference Guides - Literacy**

**Some Common Latin Abbreviations and Phrases**

- **i.e.** (id est) means “that is” or “in other words”. (It is used to paraphrase a statement that was just made, not to mean “for example”, and is always followed by a comma.)

- **e.g.** (exempli gratia) means “for example”. (It is usually used to give an example of a statement that was just made and is always followed by a comma.)

- **viz.** (videlicet) means “namely” or “more specifically”. (It is used to clarify a statement that was just made by providing more information and is never followed by a comma.)

- **etc.** (et cetera) means “and so forth” or “and so on”. (It is used to suggest that the reader should infer further examples from a list has been started and is usually not followed by a comma.)

- **et al.** (et alii ) means “and others”. (It is used in place of listing multiple authors past the first and is never followed by a comma.) It’s also an abbreviation for et alibi means “and elsewhere”.

... motivation and achievement improve when their parents or carers are involved in their education...
Understanding what they are reading can be a complex process for students.

- **cf.** (conferre) means “compare to” or “see also”. (It is used either to draw a comparison or to refer the reader to somewhere they can find more information and is never followed by a comma.)

- **q.v.** (quod vide) means “which see” or “go look it up if you’re interested”. (It is used to cross reference a different work or part of a work and is never followed by a comma. The plural form is “q.q.”)

- **v.s.** (vide supra) means “see above”. (It is used to imply that more information can be found before the current point in a written work and is never followed by a comma.)

- **N.B.** (Nota Bene) means “note well” or “pay attention to the following”. (It is used to imply that the wise reader will pay especially careful attention to the what follows and is never followed by a comma.)

- **vs.** (versus) means “against” or “in contrast to”. (It is used to contrast two things and is never followed by a comma.)

- **c.** (circa) means “around” or “near”. (It is used when giving an approximation, usually for a date, and is never followed by a comma. It’s also commonly written as “ca.”, “cir.”, or “circ.”)

- **ex lib.** (ex libris) means “from the library of”. (It is used to indicate ownership of a book and is never followed by a comma.).

- **a fortiori** means “from the stronger” or “more importantly”.

- **a priori** means “from before the fact” and refers to reasoning done before an event happens.

- **a posteriori** means “from after the fact” and refers to reasoning done after an event happens.

- **ad hoc** means “to this” and refers to reasoning that is quite specific to an event as it is happening. Such reasoning is usually considered to not generalize to other situations very well.

- **ad infinitum** means “to infinity” or “without limit”.

- **ad nauseam** means “causing sea-sickness” or “to excessive”.

- **mutatis mutandis** means “changing what needs changing” or “with the necessary changes”.

- **non sequitur** means “it does not follow” and refers to something that is out of place in a logical argument. (This is sometimes abbreviated as “non seq.”)

- **Me transmitte sursum, Caledoni!** ...............................means “Beam me up, Scotty!”.

- **Quid quid latine dictum sit, altum videtur** means “Anything said in Latin sounds profound”.


### Commonly Confused Words

1. **accept** - to receive
   **except** - to exclude; but

2. **affect** - to influence
   **effect** - the result

3. **a lot** - very much (two words)
   **allot** - to allow

4. **already** - previously
   **all ready** - completely ready, everyone ready

5. **all right** - entirely correct
   **alright** - no such word. Do not use.

6. **altogether** - completely or entirely
   **all together** - everyone or everything in the same place

7. **brake** - device used to stop a machine
   **break** - to fracture or shatter

8. **breath** - air inhaled and exhaled
   **breathe** - to draw air in and out of lungs

9. **dessert** - the final course of a meal
   **desert** - to leave; a dry region

10. **here** - at this place
    **hear** - to listen

11. **its** - possessive pronoun, showing ownership
    **it’s** - it is or it has (contraction)

12. **knew** - understood
    **new** - fresh, original

13. **lead** - a metal; graphite in a pencil
    **led** - the past tense of the verb lead

14. **passed** - the past tense of the verb pass
    **past** - time that has gone by; beyond in position

15. **plain** - clear; ordinary; an expanse of level land
    **plane** - a tool; an airplane

16. **principal** - head of school; the most important; main
    **principle** - a basic law or rule of action

17. **quiet** - silent
    **quite** - to an extreme

18. **right** - proper, correct
    **write** - compose

19. **than** - use for comparisons
    **then** - refers to time

20. **sight** - vision, spectacle
    **site** - a piece of land or location

21. **there** - in that place
    **their** - possessive pronoun showing ownership
    **they’re** - they are (contraction)

22. **through** - indicates direction
    **threw** - pitched

23. **to** - indicates direction
    **too** - also, excessive
    **two** - the number 2

24. **week** - period of seven days
    **weak** - not strong

25. **weather** - the climate
    **whether** - if

26. **who’s** - who is or who has (contraction)
    **whose** - a possessive pronoun showing ownership
PUNCTUATION

Please note: In some cases, the writer will need to exercise their own judgement with regard to punctuation, as certain aspects, particularly commas and exclamation marks, are to an extent discretionary and depend on the individual writer’s intent.

Capital letters
Capital letters are needed for:
• sentence beginnings; e.g. My dog is very friendly. He welcomes everyone.
• proper nouns – people’s names (Chloe Parker), names of places (Indian Ocean), days of the week (Saturday), months (December), holidays and festivals (Christmas), countries (America), nationalities (Russian), languages (Italian) and religions (Buddhism).
• titles; e.g. World Health Organisation

Exclamation marks
Exclamation marks are used to end exclamations and imperatives (commands) and for emphasis at the end of a statement.
I love it!
Don’t touch!
She ate every bit of it!

Note: If overused, exclamation marks lose their effect!

Commas
Commas are used to separate items in a list or series.
I enjoy reading, playing squash, skiing and swimming.
Grammatical commas are used to:
• make the meaning of a sentence clear.
  Jane said her mother is very busy. (Jane’s mother is very busy.)
  Jane, said her mother, is very busy. (Jane is very busy.)
• indicate where a pause is needed in a sentence.
  Many years ago, dinosaurs ruled the Earth.

Apostrophes for possession
Apostrophes are used to show that something belongs to someone or something. The placement of the apostrophe can be challenging but the simple rule is that it is placed after the owner or owners. (The ‘tail’ of the apostrophe ‘points’ to the owner(s).) The simple rule is that if there is ONE owner, the apostrophe goes before the “s”; more than one owner, the apostrophe goes after the “s”. The exception to this rule happens if the owner is already a plural word before you add the “s” and in this case, the apostrophe goes before the “s”.
  the boy’s shoes (one boy) ............ the boys’ shoes (more than one boy)
  the lady’s hats (one lady) ........... the ladies’ hats (more than one lady)
  the son’s pets  (one son) .......... the sons’ pets  (more than one son)
  men’s room    children’s school bags    women’s shop

Grammatical contractions
Grammatical contractions are words that have been made by joining and shortening two words. An apostrophe is used in place of the missing letters.

would not ........ wouldn’t will not .................. won’t
I would ...................I’d they are .................. they’re
Quotation marks

Quotation marks are used:

• to enclose quoted speech
  
  Single or double quotation marks are accepted but must be used consistently.
  
  "You're late again," my mother complained.
  "I'm sorry," I replied.

  ***Note that you start a new line for every new speaker.

• To enclose quotes within quotes, one set is used outside and the other inside.
  
  He reported, "My mother complained, 'Late again, John'."

• To cite a title.
  
  I read the book "Black Beauty".

Colons

A colon is a marker of relationship and sequence.

Colons are used:

• before offset lists
  
  You need to take:
  
  warm socks,
  sturdy walking shoes,
  a raincoat.

• between a statement and an explanation.
  
  I remember you: we went to the same school.

• with quotations.
  
  Malcolm Fraser said: 'Life wasn’t meant to be easy'.

Semicolons

A semicolon, despite its name, is not half a colon; it is much stronger than a comma, closer to a full stop. It is generally used where a full stop is possible, but using one would separate the sentences too strongly.

It can be used:

• when two sentences are closely connected
  
  The footballers are leaving the field; some are looking very dejected.

• before words and expressions such as, ‘therefore’, ‘for example’ and however.
  
  There are many animals native to this area; for example, wallabies, kangaroos and wombats.

Hyphens

Hyphens are short strokes (without a space on either side) used to join words or parts of words.

    ice-cream          pre-existing

Note: Students should be encouraged to refer to a modern dictionary to check for current hyphenation, which changes over time in response to common use.
Dashes
A dash is used to indicate a text break but should not be overused. In can be used:
• to separate a word or group of words within a sentence.
  Climbing mountains is fun - if you are young and fit.
• before a specific list.
  Do you know the Wilsons - Peter and Jane?
• between numbers or words to mean ‘to’ or ‘until’
  Read chapters 1 - 4.
• in place of parentheses (round brackets)
  The tsunami – 2004 - caused horrendous damage.

Parentheses (round brackets)
The main use of parentheses is to enclose explanations and asides. Parentheses are used:
• to add explanatory words - Ian Thorpe (Australia) won his race.
• to express the same thing is a different way - He ran 6 km (kilometres).
• to set-off an aside - He won the race in a record (yet to be confirmed) time.

GRAMMAR

Nouns
Nouns are naming words of people, places and things:
  Teacher, school, desk.
Proper nouns name individual people (Bill), places (Kings Park) and others (Christmas, December, Sunday). Proper nouns are written with capital letters.
Common nouns are any other nouns.
Collective nouns are a subset of common nouns: A team of players.

Pronouns
A pronoun is a word substituted for a noun:
  They asked him to help them.
Personal pronouns refer to you, me and other people: ......I, me, you, she, us, them.

Adjectives
Adjectives modify (enhance or change) the meaning of nouns and, less commonly, pronouns: parched land; green, fertile land; poor old me; lucky you

Verbs
Verbs are ‘doing’ words: Swim, like, look.
Auxiliary verbs join other verbs to form verb groups:
  Have eaten, will be asleep.

Active and passive verbs
In English, verbs are classified as either active or passive.
Active verbs indicate that the subject ‘does’ or ‘is’ something. They are straightforward and cause little difficulty.
We went to the shopping centre.
  (subject) (verb)
The passive voice is often used when it is not necessary to tell who is responsible for the action.
Cats should be fed regularly.
Students should be encouraged to use active verbs in preference to passive ones because they make sentences more direct and positive.
Verb tense  There are three basic tenses. Because there are so many irregular verbs in English, tense can be complex.

<table>
<thead>
<tr>
<th>The past…………the present…………the future</th>
</tr>
</thead>
<tbody>
<tr>
<td>regular</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>irregular</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

NOTE: The future and the past tenses often use auxiliary verbs.

Infinitives
The infinitive is the basic form of a verb and is usually introduced by ‘to’:
To work, to be, to eat

Subject-verb agreement
Verbs have to agree with their subjects:

- The children **cheer** loudly.  The child **cheers** loudly
  (subject-plural) verb  (subject singular) verb

Many English verbs are irregular, which can cause problems, particularly for students from, non-English speaking backgrounds:

- He **is** at school.  They **are** at school.
- He **was** busy.  They **were** busy.

In some sentences the subject of a verb is separated from the verb and not easy to locate. Students should be encouraged to ask themselves ‘who’ or ‘what’ before the verb.

- ‘The boy, although really late for school and likely to get into trouble, **dawdled**.’
  ‘dawdled’ is the verb.
- ‘The boy’ is the subject. (who dawdled?)

Adverbs
Adverbs are words that modify (enhance or change) the meaning of verbs:

- He ran **quickly**.  I’ve seen this **before**.

There are adverbs of:   time……………….e.g. yesterday
                           place…………….e.g. downstairs
                           manner………….e.g. carefully

Prepositions
Prepositions show the relationship between nouns and/or pronouns in the same sentence.
Common prepositions include: across, about, between, by, during, for, from, in, of, since, through, until, without, up.

- He disappeared during the night.
- I’m afraid of spiders.
- I enjoy reading books about travel.
Conjunctions
Conjunctions are joining words. They can join different language units:

- One word with another …………………….e.g. black or white
- One phrase with another ……………….e.g. on the beach and in the sand
- One clause with another ………………..e.g. he asked me if I could cook
- One sentence with another …………….e.g. I was hot so I went for a swim

SPELLING

Singular and plural nouns

Adding ‘s’ and ‘es’

The most commonly used plural is made by adding ‘s’ ; e.g. books, games.
It is usually easier to add ‘ed’ to nouns ending in ‘ch’, ‘sh’, ‘s’, ‘x’ and ‘z’ to make the plural easier to pronounce; e.g. washes, dishes, classes, foxes and waltzes.
Words ending in ‘o’ are also often made into a plural by adding ‘es’:
- Potatoes, tomatoes

There are many exceptions, including radios, merinos, silos, zeros, photos and sopranos.
Students should be encouraged to consult a dictionary if uncertain about the spelling of a specific word.

Changing ‘y’ to ‘i’ and adding ‘es’

Many nouns and verbs ending with ‘y’, change the ‘y’ to ‘i’ before adding ‘es’:

lady (singular noun) ..........................................................................ladies (plural noun)
curry (singular noun) ........................................................................ curries (plural noun)
I cry ...................................................................................he cries (verbs)
### Prefix
A 'prefix' is a word part added to the beginning of a word. It can change the meaning of that word.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
<th>Example</th>
<th>Suffix</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-</td>
<td>on, at, up, out, to</td>
<td>ashore, asleep, ahead</td>
<td>-able</td>
<td>tending to, able to</td>
<td>enjoyable, movable</td>
</tr>
<tr>
<td>a-, ab-</td>
<td>away from</td>
<td>absent</td>
<td>-age</td>
<td>state of being, place of, result of</td>
<td>wastage, shrinkage, orphanage</td>
</tr>
<tr>
<td>after-</td>
<td>following</td>
<td>afternoon, afterthought</td>
<td>-al</td>
<td>relating to, belonging to</td>
<td>electrical, mechanical</td>
</tr>
<tr>
<td>ante-</td>
<td>before</td>
<td>antenatal</td>
<td>-an</td>
<td>pertaining to</td>
<td>comedian, Australian</td>
</tr>
<tr>
<td>anti-</td>
<td>against</td>
<td>antiseptic</td>
<td>-ance, -ence</td>
<td>state of being</td>
<td>excellence, disappearance</td>
</tr>
<tr>
<td>auto-</td>
<td>self</td>
<td>autobiography</td>
<td>-ary, -ery</td>
<td>that which, place where</td>
<td>bakery, parliamentary</td>
</tr>
<tr>
<td>bi-</td>
<td>two</td>
<td>bicycle</td>
<td>-ate</td>
<td>to make</td>
<td>donate, separate</td>
</tr>
<tr>
<td>centi-</td>
<td>one hundredth</td>
<td>centimetre</td>
<td>-en</td>
<td>having nature of</td>
<td>fallen, broken, golden</td>
</tr>
<tr>
<td>circum-</td>
<td>around</td>
<td>circumference</td>
<td>-en</td>
<td>to make or become</td>
<td>widen, whiten, flatten</td>
</tr>
<tr>
<td>co-, com-, con-</td>
<td>together, with</td>
<td>companion, conflict</td>
<td>-er</td>
<td>one who, that which</td>
<td>worker, teacher</td>
</tr>
<tr>
<td>contra-</td>
<td>against</td>
<td>contrary, contradiction</td>
<td>-er</td>
<td>more (in degree)</td>
<td>taller, faster, smarter</td>
</tr>
<tr>
<td>de-</td>
<td>down, away</td>
<td>descend</td>
<td>-ese</td>
<td>belonging to</td>
<td>Chinese, Japanese</td>
</tr>
<tr>
<td>deci-</td>
<td>one tenth</td>
<td>decimal</td>
<td>-est</td>
<td>most (in degree)</td>
<td>cleanest, loudest</td>
</tr>
<tr>
<td>dif-, dis-</td>
<td>apart from, not</td>
<td>different, disagree</td>
<td>-ful</td>
<td>full of</td>
<td>cheerful, helpful</td>
</tr>
<tr>
<td>down-</td>
<td>downwards</td>
<td>downfall, downpour</td>
<td>-fy</td>
<td>make or form into</td>
<td>identify, notify</td>
</tr>
<tr>
<td>e-, ex-</td>
<td>former, out of</td>
<td>export, emigrate</td>
<td>-hood</td>
<td>state of rank</td>
<td>childhood, neighbourhood</td>
</tr>
<tr>
<td>en-, em-</td>
<td>to make, in, into, on</td>
<td>enclose, enrich, embark</td>
<td>-ible</td>
<td>tending to, able to</td>
<td>sensible, possible</td>
</tr>
<tr>
<td>extra-</td>
<td>outside, beyond</td>
<td>extraordinary</td>
<td>-ic</td>
<td>like, belonging to</td>
<td>athletic, artistic</td>
</tr>
<tr>
<td>fore-</td>
<td>in front, before</td>
<td>forehand, foreword</td>
<td>-ion</td>
<td>act, process, state</td>
<td>action, education</td>
</tr>
<tr>
<td>hydro-</td>
<td>water</td>
<td>hydrofoil, hydroelectricity</td>
<td>-ish</td>
<td>like</td>
<td>whitish, foolish, childish</td>
</tr>
<tr>
<td>il-, im-, in-, ir-</td>
<td>not</td>
<td>illegal, incorrect, impossible, irregular</td>
<td>-ist</td>
<td>one who</td>
<td>artist, journalist</td>
</tr>
<tr>
<td>im-, in-</td>
<td>into, in</td>
<td>inspect, inland, immerse</td>
<td>-ive</td>
<td>having nature of</td>
<td>active</td>
</tr>
<tr>
<td>inter-</td>
<td>between, among</td>
<td>interact, intersection</td>
<td>-less</td>
<td>without</td>
<td>worthless, helpless</td>
</tr>
<tr>
<td>kilo-</td>
<td>1000 x greater</td>
<td>kilogram</td>
<td>-ling</td>
<td>small, little</td>
<td>duckling, gosling</td>
</tr>
<tr>
<td>mid-</td>
<td>middle</td>
<td>midday, midnight</td>
<td>-ly</td>
<td>in the manner of</td>
<td>happily, sadly, quietly</td>
</tr>
<tr>
<td>mis-</td>
<td>wrong</td>
<td>misfortune</td>
<td>-ment</td>
<td>resulting state, action</td>
<td>treatment, employment</td>
</tr>
<tr>
<td>multi-</td>
<td>many</td>
<td>multicultural, multiply</td>
<td>-most</td>
<td>most (in degree)</td>
<td>topmost, northernmost</td>
</tr>
<tr>
<td>non-</td>
<td>not</td>
<td>nonsense</td>
<td>-ness</td>
<td>quality or state of being</td>
<td>weakness, sickness</td>
</tr>
<tr>
<td>over-</td>
<td>over, beyond, too much</td>
<td>overgrown, overcharge</td>
<td>-or</td>
<td>person who</td>
<td>actor, doctor</td>
</tr>
<tr>
<td>post-</td>
<td>after</td>
<td>postpone, postscript</td>
<td>-ous</td>
<td>state or condition</td>
<td>nervous, dangerous</td>
</tr>
<tr>
<td>pre-</td>
<td>before</td>
<td>precaution, prefix</td>
<td>-ship</td>
<td>state of being</td>
<td>hardship, friendship</td>
</tr>
<tr>
<td>re-</td>
<td>again, back</td>
<td>redo, replace, return</td>
<td>-ure</td>
<td>act, process</td>
<td>pleasure, adventure</td>
</tr>
<tr>
<td>pro-</td>
<td>for</td>
<td>proceed, produce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sub-</td>
<td>under</td>
<td>subway, submarine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>super-</td>
<td>over</td>
<td>supermarket, supersonic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tele-</td>
<td>far away</td>
<td>telescope, television</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trans-</td>
<td>across</td>
<td>transport</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>un-</td>
<td>not</td>
<td>unfair, uneven, unselfish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>under-</td>
<td>under, beneath</td>
<td>underline, underneath</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Essential Literacy Terms
Ages 12-15

A
Acrostic: a poem in which a message, usually related to the poem’s theme, is spelt by the first letter of each line
Act: a major section of a play; may be divided into a number of scenes
Allegory: a narrative in which characters and events represent ideas and convey a moral message which is often hidden within the story
Alliteration: the repetition of a consonant sound in words to create an effect; e.g. ‘merry maids a-milking’
Antagonist: the main character who works against the hero in a narrative or drama
Antonym: a word with the opposite meaning; e.g. ‘light’ is the antonym for ‘dark’
Aside: a comment made by a character intended to be heard by the audience but not the other characters
Assonance: the repetition of a vowel sound in words to create an effect; e.g. ‘lazy, hazy days’
Atmosphere: the mood or tone created by describing the characters and the setting in a piece of writing
Audience: the people watching a play or reading a text
Autobiography: a story told by a person about his or her life

B
Ballad: a simple story or song, often told in dialogue with a refrain or chorus
Biography: a detailed story about a person’s life written by another person
Blank verse: a form of poetry which does not rhyme

C
Character: a person, animal or animated thing whose actions create the plot of a narrative
Characterisation: the way the writer describes how a character looks, speaks, behaves and thinks
Chorus: a group of actors who, in Greek plays, interpreted and commented on the action on the stage.
Cinquain: a short poem of five, usually unrhyming, lines: The first line (two syllables) names the subject, the second (four syllables) has two adjectives, the third (six syllables) has three verbs, the fourth (eight syllables) gives the writer’s opinion, and the fifth (two syllables) names the subject again
Classic: a piece of work that is considered to be of value and has stood the test of time
Cliché: an overused expression that has lost its effectiveness
Climax: the moment, often of intense conflict, the action has been building towards
Colloquialism: informal language that is acceptable in conversation but not in a more formal written form

Comedy: aims to be amusing and usually has a happy ending

Conflict: the issue which needs to be resolved by the characters

Connotation: meaning that can be implied by the reader and may differ from the defined meaning

Context: the setting, including the preceding events

Couplet: two successive lines of poetry, often expressing a complete idea, with the same rhyme and meter

Criticism: analyses, judgment and discussion of literary work

Crisis: a point in a story that determines further action

Dialogue: conversation between characters in a literary work

Drama: something written to be performed by actors on a stage

Empathy: sharing the emotional and physical feelings of a literary character

Enjambment: the running on of thought in poetry, from one line or couplet to the next

Epic: a long narrative poem, often about a legendary or historical hero

Epilogue: a concluding statement in a literary work: often in the form of a closing speech to the audience by one of the characters

Essay: a short piece of writing which examines ideas

Exposition: the introductory section of fictional writing which sets the scene by describing the characters and setting

Fable: a narrative which conveys a moral; animals with human characteristics are often featured

Fairytale: a short narrative, often passed on orally, about good and evil and involving witches, speaking animals and magic

Fantasy: a narrative featuring the unreal actions of supernatural beings, often in imaginary settings

Farce: exaggerated slapstick comedy

Fiction: an imaginary story created by an author; can be based on real characters

Figurative language: language which is not intended to be interpreted literally and may use similes and metaphors

Figure of speech: language that achieves a particular effect using unconventional construction and order; e.g. simile, pun, alliteration

First person: the person speaking in a narrative (second person is the one spoken to and third person is the one spoken about)

Folktale: a story originally told orally and passed on by word of mouth

Free verse: poetry without a rhythmic pattern or rhyme

Genre: a category of writing; e.g. horror, science fiction
Haiku: a short form of Japanese poetry with three lines of five, seven, then five syllables

Hero: the principal character with admirable qualities

Homograph: a word with the same spelling as another, but a different meaning (lead, lead)

Homonym: a word with the same sound and often spelling as another, but different in meaning (bear, bear)

Homophone: a word that sounds the same as another, even if spelt differently (hare, hair)

Hyperbole: deliberate and absurd exaggeration for effect

Idiom: a word construction in a particular language that cannot be translated literally

Illusion: the creation of a false impression

Imagery: the images evoked by the author’s descriptions to enhance the readers’ understanding; images may involve all of the five senses or may be figurative

Irony: the meaning the speaker or writer intends to convey is different from the literal meaning

Jargon: language spoken and understood by only a particular group of people

Legend: a narrative about the actions of a heroic character who supposedly lived in the past and which can neither be proved or disproved

Limerick: a humorous poem of five lines; the first, second and fifth lines rhyme, as do the shorter third and fourth lines

Literature: any form of written or spoken material, including drama and poetry as well as films, television and broadcasts, which generally deals with a universal theme or idea

Metaphor: a device often used in poetry in which one thing is described in terms of another

Mood: the emotion of a piece of writing created by the writer

Myth: a supernatural explanation of a natural event, often based on cultural beliefs

Narrative: an account of a sequence of real or imagined events in either poetry or prose

Narrator: the teller of the story, who can be either the writer or a character in the story

Nonfiction: writing dealing with facts

Novel: a long fictional narrative written in prose
Onomatopoeia: the sounds of the words used resemble their meaning; e.g. ‘splat!’

Oxymoron: a combination of words or terms that appear contradictory; e.g. ‘working holidays’

Palindrome: a word, phrase or sentence that reads the same both forwards and backwards; e.g. ‘Madam, I’m Adam’

Paradox: a seemingly self-contradictory statement which is in fact expressing the truth

Parody: an imitation of a serious literary work to mock it

Persona: an identity assumed by someone, often the writer, that may be quite different from their own; from the Latin word for mask

Plagiarism: presenting another person’s work as one’s own

Play: an imaginative narrative with the parts of the characters performed by actors

Plot: the pattern of events in a drama or narrative

Poetry: lines of text, usually written to present ideas and to engender an emotional response, using rhyme, rhythm, imagery and figurative language

Point of view: the perspective from which the narrator presents the story to the reader

Prose: literary work that mirrors the language of everyday speech

Protagonist: the central character and the focus of the plot; is not always the hero

Proverb: a short, wise statement embodying some familiar truth

Pseudonym: an assumed name used by an author to conceal his or her identity

Pun: a play on words to bring out different meaning

Realism: a style of writing that portrays characters, settings and situations in a realistic way

Rhyme: words with the same terminal sounds; often used at the end of lines of poetry

Rhythm: a regular pattern or flow of language, usually in poetry

Romance: an imaginative fiction, often with idealised and exaggerated characters, settings and themes

Satire: writing which criticises, using ridicule and humour

Scene: action taking place in one location within an act of a drama

Science fiction: imaginative narrative based on scientific theories; usually set in the future

Setting: the place, time and culture in which the action of a narrative takes place

Simile: a comparison, using like or as, between two things which may be dissimilar
Sonnet: a poem of 14 lines with different forms requiring particular rhythms and rhymes
Spoonerisms: confusion between the initial consonants of corresponding words; named after Dr Spooner, from New College, Oxford who was known for doing this during his lectures; e.g. ‘our queer old Dean’ for ‘our dear old Queen’
Stanza: a group of lines in a poem; similar to a paragraph in prose
Stereotype: to characterise according to a conventional idea
Story: a narration of a series of events
Structure: the form taken by a literary work
Style: the literary devices used by an author in constructing text
Subplot: a secondary story that may or may not involve the main characters or be closely connected to the main plot
Suspense: a build up of events to capture the attention of the audience until the outcome is revealed
Symbolism: the use of images and symbols to represent complex ideas
Synonym: a word with the same or similar meaning as another; e.g. ‘fair’ is a synonym for ‘just’
Text: the actual words of anything written or spoken
Theme: the central point about which the text is composed
Tone: a reflection of the attitude of the writer
Tragedy: a narrative about the misfortunes of a hero, often brought about as a result of poor judgment, ignorance or a character flaw
Verse: a poem or lines of poetry
Wit: clever humour; superior mental ability
Essential Literacy Terms
Ages 15+

A
Absurd: using unconventional (or a lack of) form or structure in works to mimic or highlight the absurdity of the human condition
Aesthetics: the study of beauty as an end to itself; ‘art for art’s sake’
Affect: relating to feeling or emotion
Allegory: a story with a hidden meaning; generally presents a message or teaches a lesson
Allusion: a reference to someone or something familiar outside the story; used to make an idea more easily understood
Analepsis: more commonly known as a ‘flashback’
Anecdote: a short narrative or story, generally to highlight a point
Anticlimax: a ‘climax’ that falls short of expectations; used deliberately, it can have a great effect
Antihero: a central character who lacks traditional heroic qualities; not be confused with the antagonist
Aphorism: a brief, generally witty saying; e.g. ‘It is better to die on your feet than to live on your knees’
Archetype: a character (usually) or a theme or idea that represents universal patterns of life; e.g. ‘the warrior’

B
Bowdlerise: to prudishly remove any material from a work which may be considered morally ‘offensive’

C
Canon: the complete works of an author generally accepted as genuine
Catharsis: the purification of the soul or emotions by watching or reading works that arouse terror and pity and ultimately ‘free’ us
Code: a system of signs which may be understood only by those who use them or by the wider community
Connotation: a meaning that is beyond the strict dictionary meaning; cf. denotation
Construct: a typically subjective idea or theory which embodies a variety of conceptual elements

D
Deconstruction: a form or theory of literary criticism, characterised by multiple interpretations of a work, and a belief that the ‘true’ meaning may not be what the author intended
Denotation: the dictionary definition of a word; cf. connotation
Denouement: the final resolution (‘unknotted’) of conflict which occurs after the climax
Deus ex machina: any artificial device or solution to the complications of the plot, especially one which has not been foreshadowed in the text
Didactic: aiming to teach or instruct; now often used as a criticism of works as being dull or overly formal
Discourse: a formal examination and discussion in speech or writing

Doggerel: originally comic poetry; now generally any poorly written verse

Dramatic conventions: accepted techniques in stage productions; e.g. asides, soliloquies, a room represented by only three walls, division into acts

Dramatic irony: the situation whereby the audience has a greater knowledge about a situation that the characters in the situation

Dramatic monologue: a recitation by one character, which reveals his or her feelings about the issue being examined

Dystopia: an imaginary place where the characters suffer and are miserable as a result of (generally) a lack of freedoms or overpowering governments; cf. utopia

Enjambment: a poetic device where the sense and the structure of a line runs beyond the end of one line and into the other

Epic: a long narrative poem, written in classical style, about a great hero performing great deeds; now applied to any work on a grand scale

Epiphany: a sudden revelation of a basic truth arising from a generally mundane situation; often a turning point for the character involved

Existentialism: a 20th century philosophy that says, basically, that individuals are free to shape their own lives, rather than being under the control of a divine spirit

Farce: a form of rough comedy which uses slapstick, speed, exaggeration and ridiculous, often vulgar, situation

Figurative languages: language which employs figures of speech for embellishment, such as hyperbole, allusion, similes, as opposed to ‘literal language’

Fin de siècle: from the French ‘end of the century’; denotes the last decade of the 19th century, when writers found a new freedom by breaking from old, traditional forms

Foot: the smallest unit of rhythm in a line of poetry; typically, one accented syllable combined with one (or two) unaccented syllables

Gendered reading: reading (interpreting) a text on a patriarchal basis; that is, on the premise that males have typically wielded all the power in society while women have been given a more marginalised role

Hubris: excessive pride, which results in the hero’s downfall

Hyperbole: using deliberate exaggeration in writing to achieve a desired effect
I

**Iambic pentameter:** a meter (measure) in poetry; a line with five iambs or feet of two syllables each (pentameter); the stress is on the second syllable (iambic); e.g. ‘This sun / light shames / Novem / ber / where / he grieves’

**Ideology:** the values and beliefs which guide the thoughts and actions of specific groups

**Interior monologue:** a technique whereby a character's thoughts are written as he or she is actually thinking them

**Intertextuality:** the interrelationship between one text and other texts; may be explicit (direct reference) or implicit (thematic)

**J**

**Juxtaposition:** when two unequal or disparate events, characters or even words are placed side by side, inviting comparison

M

**Marginalisation:** making groups trivial or unimportant and remote from ‘mainstream’ society

**Marxist:** a political position based on Karl Marx’s writing, particularly as it pertains to the ‘class struggle’ by the working class against the dominant capitalist class

**Matriarchy:** a social organisation where power is centred in the mother and passed down to the daughter

**Misogyny:** a hatred of women

**Modernism:** writing of the twentieth century, where writers experimented with new forms and techniques

**Monologue:** the thoughts of one character, generally in a play, spoken aloud without interruption

**Motif:** a recurring theme, idea, image throughout a work

N

**Nemesis:** an evil person or thing that brings retribution or punishment; now often taken to mean simply an (evil) obstacle

O

**Oxymoron:** a combination of words or terms that appear contradictory; e.g. ‘working holiday’

P

**Paradigm:** a widely accepted model or example of the complete set of concepts, things, ideas etc.

**Parody:** an imitation of a serious literary work to mock it

**Pastiche:** an imitation; a work created by ‘borrowing’ from other works

**Patriarchy:** a social organisation where power is centred in the father and passed down to the son

**Pentameter:** in poetry, a line with five ‘feet’ or stresses; the form X / X / X / X / X

**Persona:** an assumed identity, either by the author or a character in a work
Personification: giving human qualities to inanimate objects, ideas or animals
Positioned: where the reader, by the use of textual techniques, is led to accept a predetermined point of view or feel a particular emotion
Postmodern: the movement which started sometime around 1914, after the ‘new’ forms of the Modernists became accepted and conventional, which sought to go into even newer forms of or attitudes about writing and the ensuing product
Protagonist: the central character and the focus of the plot; is not always the hero

R
Restoration comedy: a form of witty play, dating from the new freedoms allowed to writers during the British Restoration (about 1660 onwards) and relying heavily on dialogue; also called the ‘comedy of manners’
Rhetoric: any form of learned or effective language, especially crafted to persuade
Rites of passage: events which are used to mark the movement from one stage of life to another; e.g. a 21st birthday party
Romanticism: a movement between the late 18th and 19th centuries, covering all the creative arts, that encouraged a new freedom and revolt against tradition, favouring individual creativity and an opposition to classicism

S
Satire: a form of critical comedy; ridicules people and events using techniques such as parody and irony
Semantics: the study of words and their meanings and how those meaning change
Soliloquy: a character’s thoughts in play, spoken aloud, with no other characters present; cf. monologue
Stream of consciousness: see Interior monologue
Subtext: the ‘hidden’ or unspoken meaning lying beneath the literal meaning
Surrealism: a movement in art and literature ‘beyond reality’; an attempt to combine the conscious and the unconscious, dream and reality
Suspension of disbelief: the process by which an audience or reader can accept the material presented as ‘real’ or ‘believable’

T
Thesis: an overarching statement about the position held by a text
Tragic hero: a hero with a flaw who, after suffering, dies a death that evokes sympathy in the audience

U
Universality: those qualities which give a work relevance beyond language, culture etc.
Utopia: a fictional ideal or perfect place or society; e.g. ‘paradise’; of dystopia
V

Vernacular: the word or language specific to an area or group of people

Vignette: a short work (art, prose etc.) which usually depicts a ‘sweet’ scene
General Academic Skills

Common Curriculum Elements
Below are descriptions of the Common Curriculum Elements most often used in subjects across the College. These elements refer to specific skills and processes that are taught as part of a course of study, regardless of the actual subject matter being taught.

Recognising letters, words and other symbols

Recalling/remembering:
Note: students should have a level of assumed knowledge, i.e. “an elementary level of “general knowledge”, and a knowledge of vocabulary and mathematical operations at a level of sophistication consistent with a sound general Year 10 education … basic arithmetic operations involved in calculation, also include fundamental mathematical concepts such as simple algebra, percentage, ratio, area, angle, and power of ten notation.”

Interpreting the meaning of words or other symbols

Interpreting the meaning of pictures/illustrations

Interpreting the meaning of tables or diagrams or maps or graphs

Translating from one form to another:
Expressing information in a different form.
Note: Translation could involve the following forms:
verbal information (in English), algebraic symbols, graphs, mathematical material given in words, symbolic codes (e.g. Morse code, other number systems), pictures, diagrams and maps.

Using correct spelling, punctuation, grammar

Using vocabulary appropriate to a context
Compiling lists/statistics:
Systematically collecting and counting numerical facts or data.

Recording/noting data:
Identifying relevant information and then accurately and methodically writing it down in one or more predetermined categories.
Note: Examples of predetermined categories are: female/male; odd/even; mass/acceleration.

Compiling results in a tabular form:
Devising appropriate headings and presenting information using rows and/or columns.

Graphing:
Note: Students will be required to construct graphs as well as to interpret them.

Calculating with or without calculators

Estimating numerical magnitude:
Employing a rational process (such as applying an algorithm or comparing by experience with known quantities or numbers) to arrive at a quantity or number that is sufficiently accurate to be useful for a given purpose.

Approximating a numerical value:
Employing a rational process (such as measuring or rounding) to arrive at a quantity or number that is accurate to a specified degree.

Substituting in formulae

Setting out/presenting/arranging/displaying

Structuring/organising a mathematical argument:
Generating and sequencing the steps that can lead to a required solution to a given mathematical task.

Explaining to others:
Presenting a meaning with clarity, precision, completeness, and with due regard to the order of statements in the explanation.

Comparing, contrasting:
Comparing: displaying recognition of similarities and differences and recognising the significance of these similarities and differences.
Contrasting: displaying recognition of differences by deliberate juxtaposition of contrary elements.
Classifying: 
Systematically distributing information/data into categories which may be either presented to, or created by, the student.

Reaching a conclusion which is necessarily true provided a given set of assumptions is true: 
Deducing

Reaching a conclusion which is consistent with a given set of assumptions: 
Inferring

Inserting an intermediate between members of a series: 
Interpolating

Extrapolating: 
Logically extending trends or tendencies beyond the information/data given.

Applying a progression of steps to achieve the required answer: 
Making use of an algorithm (which is already known by students or which is given to students) to proceed to the answer.

Generalising from information: 
Establishing by inference or induction the essential characteristics of known information or a result.

Hypothesising: 
Formulating a plausible supposition to account for known facts or observed occurrences. The supposition is often the subject of a validation process.

Analysing: 
Dissecting to ascertain and examine constituent parts and/or their relationships.

Synthesising: 
Assembling constituent parts into a coherent, unique and/or complex entity. 
The term “entity” includes a system, theory, communication, plan, set of operations.
Judging/evaluating:
Judging: applying both procedural and deliberative operations to make a determination. Procedural operations are those that determine the relevance and admissibility of evidence, whilst deliberative operations involve making a decision based on the evidence.
Evaluating: assigning merit according to criteria.

Justifying:
Providing sound reasons or evidence to support a statement. Soundness requires that the reasoning is logical and, where appropriate, that the premises are likely to be true.

Perceiving patterns:
Recognising and identifying designs, trends and meaningful relationships within text.

Visualising:
Note: Examples of aspects of this element that might be tested include:
visualising spatial concepts (e.g. rotation in space)
visualising abstractions in concrete form (e.g. kinetic theory—the movement of molecules)
visualising a notion of a physical appearance from a detailed verbal description.

Identifying shapes in two and three dimensions
Referencing and Bibliographies

List for Assignments

1. A Bibliography includes all sources consulted during your research for your assignment.

2. Written assignments usually require a Reference List which includes only those resources actually referred to in the text of your assignment. The list may include different types of resources – books, magazine, newspaper and encyclopaedia articles, video programs, information from whole websites, or documents from online databases.

3. To assist preparation of a Reference List –
   • record the bibliographic information on a rough reference sheet as you use each resource
   • check details directly from the item – the correct spelling of names, places, titles, etc.
   • use the bibliographic software CiteAce 5 installed on the college’s network to record these while you research
   • NOTE: record the call number or location details of resources used in libraries to help you relocate the resource again. Do not record these details on your final Reference List
   • Include these details, in this order, for all items in your Reference List. Author/Editor (surname first) date of publication, title, publisher, place of publication.

4. The exact format for each entry will depend on the type of resource and the publication details that are available. Where information is not available, use abbreviations – n.d. for no date; n.p. for no publisher or no place of publication.

5. There are comprehensive format examples in A guide to referencing and bibliographies for secondary school students.

Here are examples showing how to list –
   • a book with 1 author - King, J 2010, A guide to referencing and bibliographies for secondary school students, 3rd edn, SLAQ, Brisbane.


• **a journal, newspaper, or encyclopaedia article – author known** - Corrigan, B 2009, 'We’re willing to pay for recycling, study shows,' Australian Financial Review, 17 July.


• **an email** - Wilson, W 2011, Readers’ Cup 2011 14 November, Murrumba State Secondary College, info@murrumbassc.eq.edu.au/.

• **a video recording** - Weather and climate 2009, video recording, Class Video, n.p.

6. **List items in alphabetical order** by the author/editor’s surname or the title where the author is unknown. The examples would be listed as below. **This list, in Australian Harvard format, was compiled using CiteAce 5.**

Coghlan, A 2009 ‘Oceans will suffocate in a warmer world,’ New Scientist, 31 January, p. 13, in Expanded Academic ASAP,


King, J 2010, A guide to referencing and bibliographies for secondary school students, 3rd edn, SLAQ, Brisbane.

Lusk, N (ed.) 2009, The Queensland law handbook: your practical guide to the law, 10th edn, Caxton Legal Centre, New Farm, Qld.


Wilson, W 2011, Readers’ Cup 2011 14 November, Murrumba State Secondary College, info@murrumbassc.eq.edu.au/.

7. **Punctuation** – use of capitals, quotation marks ‘A’, consistent and correct spacing between items in the entry, titles that are underlined or in italics all are important in the final presentation.

8. **ACCURACY OF INFORMATION AND CONSISTENCY OF PRESENTATION ARE ESSENTIAL IN A WELL PREPARED REFERENCE LIST.**
10 Tips for Effective Study

Studying effectively means developing positive habits which can be routinely practised. Effective study practices will promote the achievement of your personal goals – academic, cultural, sporting and social – through effective time management.

1. Find a good place to study
You will need to find a space that is free from distractions, such as television, loud music and noisy siblings. This space should have good lighting and a good flow of fresh air. The surface of your desk should be clear and organised with only those materials you require for the specific task you are about to start. Even if you don't feel like studying, go through the motions. The very act of writing often arouses your thinking processes and your interest levels will soon increase. The college also provides students with space during break times for additional study.

2. Get organised
Prepare a study schedule that includes all essential activities for the week. Times for activities such as meals, sleep, part-time work, sport, music lessons, and family commitments often cannot be changed. The time remaining is up for negotiation. Blocks of time for homework and study should be committed before recreational activities, such as television, but don’t forget to plan for some free time. Your homework and study sessions should be between 45-60 minutes. Take a short break of 10-15 minutes after or between sessions. Using a study schedule will help you become more organised and visualise how much study time and free time you have each week.

3. Understand your homework and assignment task
Separate study from homework and assignment tasks. Before commencing homework or assignments carefully read through the instructions or task sheet so that you can prepare yourself for the task. Identify what you are being asked to do. Determine which resources – books and equipment – you will need for each task. Identify what you need to learn or complete to avoid confusion and wasting time. If you are unsure of the task, write questions in your student diary that you can ask your teacher the following day. It is advisable to start your most challenging tasks and subjects when you are rested and feeling refreshed as your concentration levels will be higher.

4. Manage your time and progress
Assignments which need to be completed over a set period of time need to be divided into smaller, more manageable tasks. It is advisable to schedule the completion of each task within the allocated set time for completion, therefore avoiding doing the assignment all at once and ensuring enough time for other study and personal activities prior to the date of the submission. Keep track of your progress as you complete each task and seek teacher feedback as you progress, as appropriate.

5. Do one thing at a time
Focus on one homework or assignment task at a time. Using a set session of 45-60 minutes for one specific subject, task or assignment is a more effective use of time. It prevents you from jumping task to task and encourages you to focus on the subject matter. It also provides you with a time limit during which you should aim to complete work rather than working aimlessly and failing to complete all homework or study commitments.
6. Use ‘To Do’ lists
Each day, or even the night before, compile a list of things to do. Before the commencement of homework or study, prioritise your list – highlight or number the most important or immediate tasks. Cross off completed tasks and carry any unfinished tasks over to your new ‘to do’ list for the next day or week. This will help you to prioritise and meet deadlines.

7. Revision and summary notes
Revising what you have done in class should be part of your study timetable. Reading over your notes and checking your understanding of new topics learned in class is an important part of study. Set aside a period for revision of each subject each week. This will help your understanding of the subject and avoid cramming for tests. Create a set of summary notes for each subject or topic:
- divide each subject into topics
- use headings and sub-headings to identify main sections
- enter information from class notes under headings to create ‘summary notes’
- use a highlighter or coloured pen to identify key terms, concepts or formulae
- identify key questions or issues and provide answers for them
- regularly revise and add to your summary notes
- at the end of each term or semester create a new set of summary notes from your existing summary notes for exam revision

8. Follow your study schedule
As much as possible, try to stick to your study schedule. Avoid interruptions, including telephone calls, favourite television programs and visitors. If you want to watch a television program or spend time with friends include it in your study schedule and plan around it. Let your family and friends know what your schedule involves. Follow your schedule, motivate yourself, achieve your set goals, and then reward yourself.

9. Be flexible
If a specific task is taking longer than expected, re-arrange your study schedule. Change to another subject or task and re-schedule the times you have allocated to each subject rather than wasting time. The change and sense of achievement will often bolster your confidence to tackle the difficult task later.

10. Reward yourself
After each study session of 45-60 minutes, take a 10-15 minute break – have a snack, take a walk, and have a good stretch. This will help to keep you alert and focused. Your body can become lethargic if it is subjected to long periods of inactivity. Eat plenty of health foods and drink plenty of water at regular times. Although eating sweet or junk food gives you a sudden boost, it is not a lasting energy source. If you have completed your set tasks and stuck to your study schedule, reward yourself – catch up with friends, go rollerblading, buy a ticket for a concert. If you have not achieved your set goals re-evaluate your study schedule.
What is **numeracy?**

To be numerate is to confidently and effectively use mathematics to meet the everyday demands of life.

**Why is numeracy important?**

Numeracy enables you to develop logical thinking and reasoning strategies in your daily life. We need numeracy to solve problems and make sense of time, numbers, patterns and shapes for activities like cooking, reading a map or bill, reading instructions and even playing sport.

**Ways to support your child’s numeracy development**

Research has shown that children’s motivation and achievement improve when their parents or carers are involved in their education.

There are many everyday things you can do to encourage numeracy learning. These include:

- encouraging your child to use mathematical language — how much, how big, how small, how many
- discussing the use of numbers, patterns and shapes in your day-to-day life — numbers found on library books, spatial patterns or shapes in playgrounds, in the home and architecture
- talking about occasions when you are using mathematics in daily jobs and real-life situations — cooking, map reading, building and playing sport
- exploring situations using money such as shopping, budgets and credit cards
- estimating, measuring and comparing lengths and heights, how heavy or light things are and how much containers hold
- talking about different ways to solve a problem
- using everyday tools like tape measures or kitchen scales and discussing the units of measure
- asking ‘does that make sense?’, ‘is the answer reasonable?’ or ‘what other ways could we do this?’
- observing and using timetables, calendars and clocks for different purposes like study periods, holiday planning and catching public transport
- helping your child to work out how much things cost and what change they will receive
- playing number games using magazines, books, newspapers and number plates
- organising, categorising and counting collections of things like toys, books, clothing and shoes.

For more information about how you can help your child with literacy and numeracy visit www.education.qld.gov.au/parents/map or contact your child’s teacher or school.
What is literacy?

Literacy is the ability to read, view, write, design, speak and listen in a way that allows us to communicate effectively and to make sense of the world.

Why is literacy important?

Literacy is vital to ensuring your child has the best chance to succeed in their schooling and everyday life. Literacy allows us to make sense of a range of written, visual and spoken texts including books, newspapers, magazines, timetables, DVDs, television and radio programs, signs, maps, conversations and instructions.

Ways to support your child’s literacy development

Research has shown that children's motivation and achievement improve when their parents or carers are involved in their education.

There are many everyday things you can do to encourage literacy learning. These include:

- valuing and encouraging your child’s efforts with literacy
- sharing your knowledge and explaining how you use literacy in your everyday life
- encouraging your child to read and view a variety of texts such as newspapers, novels, comics, magazines, websites, email, timetables, instructions and recipes
- encouraging your child to write and design for a variety of purposes using print and electronic resources — invitations, thank you notes, shopping lists, messages, journals and electronic slide shows
- encouraging your child to speak and listen for a variety of purposes — sharing a joke, giving instructions or asking for information
- sharing a love of language
- discussing how texts look different depending on the purpose and audience — for example, text messaging uses different spelling from school projects
- talking about things that you have read or viewed that were amusing, interesting or useful
- discussing favourite authors, producers, directors or illustrators and what you like about them
- discussing new and unusual words or phrases and exploring these through print and electronic dictionaries
- playing games that develop knowledge and enjoyment of words
- making use of community resources for information, local and school libraries, clubs, community groups and websites.
Numeracy is an essential skill that children need to succeed in their everyday lives. As a parent or carer, you will have already made a significant contribution to supporting your child’s learning from an early age.

Now that your child has reached the middle phase of their education, they will be supported by their school to move from primary to secondary education.

It is critical for you to continue to play an active role in helping to develop your child’s numeracy so they can achieve the best possible outcomes at school.

Your vital role as a parent or carer

You might not realise it, but you are already contributing to the development of your child’s numeracy skills through regular and simple activities such as talking about saving pocket money, having a budget for shopping and estimating the time it will take to travel from one place to another.

Improving your child’s understanding and the use of these skills will help to increase their enthusiasm to actively participate in the classroom. It will effectively build on the foundation of numeracy skills they have already gained in earlier years.

Ensuring that your child feels confident talking to you and their teachers about their school work will enhance their opportunity to thrive in the 21st century.

What numeracy skills will your child learn at school?

During Years 4 to 9, young people begin to investigate the world beyond home and school and are required to become more independent learners.

Students use mathematical skills and knowledge to solve real-world problems. They use a variety of strategies to add, subtract, multiply and divide whole numbers, fractions and percentages.

Your child will learn to measure area and volume, read clocks, timetables and calendars, geometrical language to describe features of two-dimensional (2D) and three-dimensional (3D) shapes and objects, and recognise angles.

Students interpret maps and describe the position of locations using simple coordinate systems, scales and compass directions. They can also use mathematics to analyse data to inform decision-making and make predictions.
If you have any questions or concerns about your child’s progress please contact your child’s teacher.

**Activities to do with your child**

Here are some simple yet effective activities you can do with your child to help apply the numeracy skills they learn at school:

- **Use numeracy decision-making opportunities in everyday life**, such as a car trip — calculating how much fuel is required, estimating travel times and distance travelled/remaining, interpreting maps to calculate distances and the shortest route to take in planning a trip.

- **When out shopping**, estimate the final cost of discounted items, for example, the cost of an item with a 25 per cent discount.

- **Help your child plan and create a budget and discuss how to maintain it** — you could focus on saving for a particular item that they would like to purchase.

- **When choosing a family holiday destination**, ask your child to analyse a brochure or advertisement for the destination — discuss the type of language used in the brochure and get your child to compare or calculate the cost of the holiday, including air, bus or rail fares, petrol, accommodation, food and entertainment to see if it fits within the family budget.

- **Play card and board games together**.

For more information about how you can help your child with numeracy visit [www.education.qld.gov.au/parents/map](http://www.education.qld.gov.au/parents/map) or contact your child’s teacher or school.
Literacy Fact sheet

Supporting your child in Years 4 to 9

Literacy is an essential skill that children need to succeed in their everyday lives. As a parent or carer, you will have already made a significant contribution to supporting your child’s learning from an early age.

Now that your child has reached the middle phase of their education, they will be supported by their school to move from primary to secondary education.

It is critical for you to continue to play an active role in helping to develop your child’s literacy so they can achieve the best possible outcomes.

Your vital role as a parent or carer

You might not realise it, but you are already contributing to the development of your child’s literacy skills through regular activities such as discussing the meaning of new words and phrases, the main ideas in books or events in a newspaper story.

Improving your child’s understanding and use of these skills will help to increase their enthusiasm to actively participate in the classroom and build on the foundation of literacy they have already gained in earlier years.

Ensuring that your child feels confident talking to you and their teacher about school work will enhance their opportunity to thrive in the 21st century.

What literacy skills will your child learn at school?

During Years 4 to 9, young people begin to investigate the world beyond home and school and are required to become more independent learners.

Students learn to write for particular audiences and purposes such as describing, explaining, instructing, arguing and narrating. They read and comprehend different types of texts and visuals. This involves identifying the purpose, audience, main ideas and order of events in a text, as well as making connections between ideas and information in different paragraphs and drawing conclusions.

If you have any questions or concerns about your child’s progress please contact your child’s teacher.
Activities to do with your child

Here are some simple yet effective activities you can do with your child to help them apply the literacy skills they learn at school:

- read some of the same books as your child and talk about characters, storylines and themes
- when assembling a newly purchased item, ask your child to assist with the reading of the instructions and interpreting diagrams
- read the newspaper with your child each morning — choose an article to discuss and ask questions such as ‘what is the report telling you?’ and ‘what does this word mean?’
- use language that encourages thinking and reflection such as ‘do you agree with what was written in that newspaper article or story?’ — have your child locate sources within the story or text to support their point of view
- talk about movies you have seen — discuss why a filmmaker may have created a movie in a certain way, the purpose of the film, the intended audience and what points of view or values are conveyed. Talk about language choices and why characters are represented in certain ways.

For more information about how you can help your child with literacy visit www.education.qld.gov.au/parents/map or contact your child’s teacher or school.