

# YEAR 7 FLEXIMATHS

A complete resource for learning, specifically designed to cater for the diverse needs of the classroom teacher and complement active teaching.

A series of instant, photocopiable "write on" lessons, each containing classwork, challenge, enrichment and homework with fully worked solutions.

Comprehensive revision, topic tests for a range of learning needs and a system for the progressive analysis of student learning.

Carefully structured, flexible, self-teaching format, allowing motivated students to learn independently, enabling students with content gaps to readily catch up, and providing a consistent system for use by ESL teachers, learning support staff, parents and tutors.

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## FLEXIMATHS

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# INTRODUCTION

Wouldn't you like a dollar for every person who has said to you, "I hated Maths at school". Mathematics has the almost unique quality of having no redeeming features if it is not understood. As a student progresses from year to year, their understanding relies heavily on assimilation of previous content.

Two recent international studies of Australian students analysed by Judy Anderson from the University of Sydney: 2002/3 Trends in International Mathematics and Science Study (TIMSS) and 2003 Programme for International Student Assessment (PISA)

"... revealed that Australian 15 year olds have relatively high levels of mathematical literacy where they can apply skills in mathematical principles and processes to everyday problems, whereas... our students perform less well on tests of mathematical knowledge." "... if Australia is to lift its performance in TIMSS over the next decade, then greater attention will need to be given to the teaching of BASIC FACTUAL AND PROCEDURAL KNOWLEDGE and the development of teachers' confidence and competence in teaching primary maths and science.<sup>1</sup>

Any situation which causes a student to miss any part of this basic factual and procedural knowledge can prove an obstacle to further understanding. Students who miss significant content eventually become disengaged and contribute to the disengagement of others by their inevitable distracting activities.

It is a real challenge to re-engage a student once they have become disengaged. It is far more effective to prevent disengagement in the first place. To maintain student engagement and keep up to date with content, it is important to be aware of the needs of students, parents and teachers.

<sup>1</sup> Masters 2005 (Reflections: Journal of The Mathematical Association of NSW Feb, 2006) Capitals supplied.

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# STUDENT NEEDS

## A. AN EFFECTIVE SYSTEM FOR LEARNING AND RECALL

i.e. a system of repeated exposure to the same concept in varying contexts such as:

- |  |            |
|--|------------|
| 1. Discuss and investigate concepts with the teacher and class       | Teaching   |
| 2. Practice - avoiding the reinforcement of misconceptions           | Classwork  |
| 3. Review in a different context shortly afterward                   | Homework   |
| 4. Check understanding in the following lesson                       | Check HW   |
| 5. Review again in the context of a related body of content          | Revision   |
| 6. Comprehensively check learning of this related body of knowledge  | Topic Test |
| 7. Record results - analysing strengths, weaknesses and content gaps | Analysis   |
| 8. Learn missing content   | Catchup    |
| 9. Formal summative assessment of several topics                     | Exams      |
| 10. Analyse performance and respond                                  | Reports/PT |

## B. A DIFFERENTIATED SYSTEM TAILORED TO INDIVIDUAL LEARNING NEEDS

- The fast learner with good content background needs further challenge and enrichment in every lesson
- The average to fast learner with content gaps needs well structured, comprehensive lessons with enrichment
- The slow learner with good content background needs a self-teaching structure to enable completion of work at home
- The slow learner with poor content background needs a consistent structure accessible by their tutor, parent or learning support teacher, that clearly identifies the minimum content needed for later learning
- The disorganised, forgetful student who takes a long time to get started needs clearly structured lessons provided each class and immediate "startability"

## C. A RESOURCE FOR EXTENDED ABSENCE e.g. FLU, GLANDULAR FEVER, FAMILY ISSUES

Absentees need structured self-teaching lessons and homework which can be easily checked by the teacher.

## D. A RESOURCE FOR USE PRIOR TO ACCELERATING A YEAR LEVEL

Accelerants need handy pre-tests which pinpoint exact content areas still needing attention and access to self-teaching lessons covering that content, so they can begin at their new level with confidence.

## E. A RESOURCE TO ADDRESS CONTENT GAPS FROM PREVIOUS YEARS

Students in higher years need handy self-teaching lessons or topics to address weaknesses in content from earlier years.

## F. A RESOURCE FOR MOTIVATED AND CAPABLE JUNIOR SCHOOL STUDENTS

These students need structured and complete topics suitable for independent learning. Common misconceptions should be anticipated, fully worked solutions provided and revision and testing be consistent with learning.

## PARENT AND SCHOOL NEEDS

- A. FEEDBACK FOR REPORTS, PARENT TEACHER INTERVIEWS AND UPDATE REQUESTS  
Parents need easy, comprehensive, progressive feedback on their child's progress, the ability to pinpoint specific content gaps and instant lessons/topics to address any concerns.
- B. A CONSISTENT SYSTEM FOR STUDENTS WITH LEARNING DIFFICULTIES  
ESL teachers, learning support staff, teachers, parents and tutors need to work together using a common and consistent system.
- C. CLEAR AND REASONABLE HOMEWORK EXPECTATIONS  
Parents need regular and predictable amounts of homework to help their child stay up to date and to avoid upsets at home. This may preempt the inevitable parent phone calls to the school i.e. too much, too little, too irregular, overwhelming! Homework should ideally review the classwork rather than complete it - particularly when the more complex questions usually occur at the close of an exercise.

## TEACHER NEEDS

- A. INSTANT LESSONS FOR ABSENCES, FOR USE BY NON-MATHS RELIEF TEACHERS  
Teachers need instant self-teaching lessons which include structured homework and provision for a range of speed and ability.
- B. LESSONS RESILIENT TO INTERRUPTIONS SUCH AS MUSIC LESSONS, SCHOOL PHOTOS, FIRE DRILLS, VACCINATIONS, SPORTING EVENTS AND CHOIR  
Structured self-teaching lessons which allow for students coming and going at different times within the same class.
- C. EFFECTIVE REVISION RESOURCES  
Comprehensive coverage, concepts networked in context, practice of "when to do which thing", revision of terms used and fully worked solutions.
- D. A VARIETY OF TOPIC TESTS  
Tests need to check all important skills and be a fair reflection of the content studied to positively reinforce student effort and maintain engagement. They should be easy to mark and analyse, and have fully worked solutions for the teacher. A standard test is needed for the majority of students, an extra challenge test for students who have completed more advanced work and a basic test for students who are struggling - with hints, examples and simpler questions. Also needed is a multiple choice test for pretesting or fast feedback.
- E. A WAY TO CATCH UP TO SCHEDULE WITHOUT COMPROMISING LEARNING  
Teachers need access to full self-teaching lessons which carefully cover all concepts, preferably including a single page which summarises all critical concepts.

F. LESSONS WHICH ORGANISE CONTENT TO FOLLOW A REALISTIC TIME SCHEDULE AND PREPARE STUDENTS FOR UNDERSTANDING IN LATER YEARS

Experienced full-time mathematics teachers are in scarce supply and schools are increasingly reliant on the services of teachers coming from other professions or subject areas, returning mums, part-time teachers, administrative staff, job-sharers and relief teachers. Teachers are often put in the difficult position of teaching Year 7 content, for example, without the benefit of recent familiarity with the rest of the body of knowledge in senior school. This makes it difficult to anticipate common misconceptions, know which concepts need particular emphasis, know what can be sacrificed when particular efficiency is called for, or when to encourage particular ways of setting out reasoning to facilitate further understanding as students re-meet and build on Year 7 concepts in later years.

Textbooks and accompanying resources provide far more material than can be reasonably fit into the portion of time allocated by the school (400 hours for the first 4 years of highschool). If 100 hours of teaching time is provided by the school timetable for the teaching of Year 7 Mathematics, about 10 of those hours are often lost to excursions, public holidays, vaccinations, fire drills, competitions, diagnostic testing and school events. If topic tests, assessments and examinations take 3 hours per term with 3 hours of accompanying revision, this will use up 24 more hours. This leaves only 66 hours of explanatory teaching time for the year.

A review of 3 common Year 7 textbooks, ignoring the scores of extra activities in the text and on the accompanying computer discs, shows that they contain 128, 115 and 149 exercises respectively. Every lesson requires an informed selection of content. All teachers, particularly teachers new to the content, need a resource which caters to a realistic time schedule whilst still enabling full content progression, anticipation of common misconceptions, and setting out of reasoning in ways useful to later topics.

Example of Year 7 Mathematics Teaching Time Allocation

| YEAR 7 MATHEMATICS LESSONS  | PER TERM        | PER YEAR       |
|---|-----------------|----------------|
| Tests, Assessments, Examinations  | 3 hrs           | 12 hrs         |
| Revision Lessons  | 3 hrs           | 12 hrs         |
| Interrupted Lessons   | 2.5 hrs         | 10 hrs         |
| School Photos, Excursions, Diagnostic Testing, Subject Competitions, Vaccinations, Carnivals Sporting Events, Peer Support, Emergency drills, Charity fundraising, School Camps etc |                 |                |
| <b>Explanatory Teaching Lessons</b>   | <b>16.5 hrs</b> | <b>66 hrs</b>  |
| <b>TOTAL ALLOCATED TIME</b>   | <b>25 hrs</b>   | <b>100 hrs</b> |

# THE YEAR 7 FLEXIMATHS SYSTEM

The Year 7 content is divided into 66 lessons of approximately 45 min to 1 hour. This allows for 12 revision lessons, 12 assessment lessons and various interrupted or lost lessons.

|   |         |  |         |
|---|---------|--|---------|
| Year 7 Fleximaths : 12 Topics in 66 lessons plus 12 Topic Tests* and 12 Revision Classes = 90 lessons |         |  |         |
|   | Lessons |  | Lessons |
| Number  | 6       | Patterns and Pronumerals               | 4       |
| Number Theory   | 5       | Algebra                                | 7       |
| Directed Number and the Number Plane  | 5       | Angles                                 | 5       |
| Fractions   | 8       | Shapes                                 | 4       |
| Decimals  | 7       | Measurement: Time, Length and Area     | 6       |
| Percentages and the Calculator  | 5       | Measurement: Volume, Capacity and Mass | 4       |
| * When the close of a topic coincides with an assessment or exam, it may replace the topic test       |         |  |         |

Each topic can be printed from the FLEXIMATHS disc and contains resources for students and teachers:

|  |         |                               |         |
|--|---------|-------------------------------|---------|
| STUDENT BOOKLET (can photocopied or emailed as an attachment)                            |         |                               |         |
| Student Record of Progress   |         | A revision lesson containing: |         |
| A series of 4 page (8 pages back and front) "write on" self-teaching lessons containing: |         |                               |         |
| Classwork  | 4 pages | Revision of Classwork         | 4 pages |
| Challenge  | 1 page  | Revision of Challenge         | 1 page  |
| Enrichment   | 1 page  | Crossword revising            |         |
| Homework/20  | 1 page  | all new words                 | 1 page  |
| Full Solutions   | 1 page  |                               |         |

|   |                    |
|---|--------------------|
| TEACHER RESOURCES                                       |                    |
| Teacher Record of Progress                              | Full Solutions to: |
| 4 Types of Topic Test                                   | All Tests          |
| Standard Test   | Homework           |
| Challenge Test  | Enrichment         |
| Basic Test  | Crossword          |
| Multiple Choice Test                                    |                    |
| *All tests are split into subsections for easy analysis |                    |

Each lesson is designed to be self-teaching for the motivated student and provide a useful structure for the teacher, tutor or parent helping a weaker student. The homework page reviews all concepts in each lesson and is designed like a mini-test out of 20 to be marked in the following lesson.

Each student can maintain their own record of progress which the teacher can check and photocopy at the end of each topic. An example of the record of progress for the Angles topic is as follows:

| Lesson  | Class work | Challenge Enrichment |   | Homework  | Revision | Test/s: Standard | Challenge     |
|---|------------|----------------------|---|---|----------|------------------|---------------|
|   | ✓          | ✓                    | ✓ | Mark/20   | ✓        | Mark/Subtotal    | Mark/Subtotal |
| 1. Naming and Measuring                           | ✓          | ✓                    | ✓ | 15  | ✓        | 5/6              | 4/5           |
| 2. Angle Types                                    | ✓          | ✓                    | ✓ | 20  | ✓        | 7/9              |               |
| 3. Angle Properties                               | ✓          |                      | ✓ | 17  | ✓        | 20/32            | 5/12          |
| 4. Parallel Lines                                 | ✓          |                      |   | -   |          |                  |               |
| 5. Using Angles                                   | ✓          |                      |   | 14  | ✓        | 10/13            | 1/3           |
| Lessons Absent: Lesson 4                          |            | TOTALS:              |   |   |          | 42/60            | 10/20         |
| Strengths:<br>Naming and Measuring<br>Angle Types |            |                      |   | Areas for Improvement:<br>Parallel Lines<br>Redo Lesson 4 |          |                  |               |

Teachers can also maintain their own progressive record to quickly identify students who need to catch up on content, use the homework check to identify misunderstandings before they are reinforced, and keep track of challenge and enrichment work completed.

This also allows the teacher to know in advance which level of test is appropriate for each student. In the following example, Kristina should sit the Standard and Challenge Tests and Gianni should sit the Basic Test adapted to emphasize the first 3 Lessons.

| Student Name      | Homework Mark/20 for Lesson: |    |    |    |    | Challenge completed |   |   |   |   | Enrichment completed |   |   |   |   |
|-------------------|------------------------------|----|----|----|----|---------------------|---|---|---|---|----------------------|---|---|---|---|
|                   | 1                            | 2  | 3  | 4  | 5  | 1                   | 2 | 3 | 4 | 5 | 1                    | 2 | 3 | 4 | 5 |
| 1. Kristina Devon | 20                           | 18 | 19 | 15 | 18 | 1                   | 2 | 3 | 4 | - | 1                    | 2 | - | 4 | - |
| 2. Gianni Zappala | 12                           | 10 | 9  | 3  | -  | -                   | - | - | - | - | 1                    | - | 3 | - | - |
| 3. etc.           |                              |    |    |    |    |                     |   |   |   |   |                      |   |   |   |   |

# USING YEAR 7 FLEXIMATHS

Use on a LESSON BY LESSON basis, adding to student's folders:

- for single lesson use in a regular classroom
- for teacher absences
- for interrupted classes
- for catching up to schedule

Use ENTIRE STUDENT BOOKLETS in photocopied form or email attachment:

- for topic use in a regular classroom
- for students who:
  - have had extended absences
  - are working with the help of a parent, tutor or learning support teacher
  - are working independently
  - are in higher years but targeting content gaps
  - are accelerants

Extend most students within the lesson rather than allowing them to race ahead. This:

- allows the teacher to actively teach the lesson content at the start of each class.  
Note: This is THE most effective and important component of student learning!
- ensures each student benefits from the classroom conversation by overhearing helpful ways to approach and understand the content
- facilitates opportunities for peers to help each other - there's nothing like trying to teach another student to develop a deeper understanding of a concept
- avoids slower students feeling "way behind" and faster students sacrificing understanding for quick completion
- ensures that fast and capable students receive the benefits of regular exposure over time and in different contexts, needed to fully network new concepts with their overall understanding

FOLLOW A SYSTEM FOR LEARNING AND RECALL USING REPEATED EXPOSURE TO THE SAME CONCEPT IN VARYING CONTEXTS:

- Active Teaching - students can focus on understanding rather than taking notes
- Classwork - students directed to regularly check full solutions at end of lesson  
Challenge page - for the fast and capable, optional to all  
Enrichment page - for those who complete classwork early - teacher has solutions
- Homework - mini review of classwork without solutions, to check understanding
- Mark Homework - from the board or pass around solutions for self-marking
- Revision - practice "when to do what", complete crossword to revise terms  
Revision of Challenge - for those wanting to attempt the extra Challenge Test
- Topic Test - choose appropriate level
- Record of Progress - collect/check booklets at end of topic, photocopy Record
- Catchup - direct students to redo lessons addressing areas needing improvement
- Revision for Exams - use topic revisions or multiple choice tests to revise topics
- Reports/PT - identify weak content areas and supply parent with photocopied or email attachment lessons/topics to address specific needs

# STUDENT INSTRUCTIONS

1. Write your Full Name, Year and Teacher's Name on the front of your booklet. Keep your booklet in a plastic sleeve or folder. Remember to bring the booklet to every class until the topic is complete and given to your teacher for checking. Then file it in a safe and accessible place at home for later revision and reference throughout your school years. Remember: all mathematics relies on previous learning.
  2. Use a black or blue pen for writing so that it will remain clear in the months or years ahead when you wish to refer back to this topic. A pencil can be used for diagrams. Mark your work with a red pen.
  3. Actively participate in the teacher explanation and class discussion about the lesson content. As you don't need to copy notes, you can give your full attention to understanding concepts.
  4. Complete the CLASSWORK pages first. These will ensure that you are prepared for all later topics based on this topic.
    - a. If you have not completed the CLASSWORK in class time, complete it at home. You may use the help of a parent or tutor.
    - b. If you complete the CLASSWORK before the end of the lesson:
      - i. and understand it easily and well - then complete the CHALLENGE page. This will help you understand concepts at a more advanced level and see deeper connections. Your skills in this section will be checked at the end of the topic with a CHALLENGE test. If you complete the CHALLENGE page before the end of the lesson, then continue with the ENRICHMENT page.
      - ii. but feel that you have already learned as much as you can absorb in one lesson, then complete the ENRICHMENT page. This page contains activities that will help you develop wider mathematical thinking skills. Check your answers with your teacher.
- Note: If you try to learn too much of the same type of thing in a lesson then the most recent learning may interfere with, or even replace, some of your prior learning. CLASSWORK and CHALLENGE are of a similar nature but ENRICHMENT generally contains different types of thinking skills.
5. Regularly mark your work from the fully worked solutions at the end of each lesson. Do this before starting the next page, or more often if you are unsure. It is important to practice the correct use of a skill and not to reinforce misunderstandings.
  6. Show full working where appropriate. Remember that mathematics is the "language of the universe" and you are learning how to express yourself mathematically.
  7. Complete HOMEWORK at home. HOMEWORK is a quick review of all concepts in the CLASSWORK. You will remember these best if your brain makes the connections in a different physical location after enough time has elapsed to blur your short term memory. This will help to transfer your skills and understanding to longer term memory. Don't forget to show full working. Have your HOMEWORK ready for marking in the next lesson. The HOMEWORK feedback is valuable as it alerts you to which questions you are likely to have trouble with, when you review your work prior to a test.
  8. Update your STUDENT RECORD OF PROGRESS each lesson and particularly after the topic test. Remember to mention any lessons in which you were absent, even if you caught up later, and use your test results and self knowledge to identify your strengths and areas needing improvement. Write neatly and clearly, as your teacher may photocopy the RECORD when the topic is complete.
  9. If you are absent, complete the CLASSWORK and HOMEWORK for each missed lesson, preferably before returning to school. If you are absent for a number of lessons or have fallen well behind schedule, complete the HOMEWORK only. Do just enough of the CLASSWORK to teach yourself the skills needed.

# SUGGESTIONS FOR THE TYPICAL LESSON

|          |             |                 |                                   |          |
|----------|-------------|-----------------|-----------------------------------|----------|
| Catch-up | Mark H'work | Active Teaching | Classwork<br>Challenge/Enrichment | Homework |
|----------|-------------|-----------------|-----------------------------------|----------|

1. Teacher Folder – maintain a folder containing a Student Booklet and Teacher Resources with Homework, Enrichment and Test answers. Place the Teacher Record at the front for easy access.
2. Catch-up – commend students who have completed their homework and give them 5 minutes to complete any unfinished challenge and enrichment work. Make a note (x) on the Teacher Record of students with incomplete homework and give them 5 minutes to get a head start on it. If any student does not complete homework prior to class twice in a row, ask them for their parent's contact details and call them on the third lesson in which this occurs.
3. Forgotten Booklets – keep several spare unstapled booklets at the back of the Teacher Folder and provide the missing lesson to students who forget. Make a note of the student and if it happens more than twice, or the student has lost the booklet, charge a small photocopying fee. Alternatively, email the topic to them and have them print it out at home.
4. Homework Marking – go through the homework answers on the board, explaining commonly misunderstood questions. This acts as a quick review of the previous lesson and allows previously absent students to rapidly catch up on missed content. Alternatively pass around several photocopies of homework answers and have students correct their own work. Emphasise that the value of homework feedback is to keep a record of likely misunderstandings to be reviewed prior to the topic test or formal assessment. Mistakes should be corrected with full working shown.  
NOTE: Converting the homework mark to a percentage provides an excellent opportunity to reinforce understanding of percentages throughout the year.
5. Student Record of Progress – instruct all students to record their Homework mark and tick off completed Classwork, Challenge and Enrichment in the Record of Progress at the front of their booklets. One tick per completed page with half a tick for a partial completion is ideal. Students who have missed lessons should record the lesson number in the Lessons Absent section, to highlight potential difficulties. They should catch up on missed Classwork and Homework.
6. Active Teaching – Have a lively class discussion/explanation/activity illustrating the lesson content, concepts and skills. This can be much more flexible than usual as there is no need to wait for students to copy notes. Choose examples of each skill type and ensure these are explained and understood by the majority.  
NOTE: Actively taught concepts are much easier for students to understand and recall, and are the PRIMARY source of learning in the classroom. Fleximaths is designed to complement active teaching, not replace it.
7. Classwork – set the students to practice the lesson concepts by completing the Classwork. Encourage them to show full working, as in the examples given, and to regularly check their understanding from the fully worked solutions at the end of each lesson. At the very least, a page should be marked before starting the next one. Encourage them to follow the 1 2 3 rule when they have a question.
  1. Check the solution and work backwards
  2. Quietly ask a nearby classmate for help
  3. Indicate to the teacher that help is needed, whilst continuing with other questions
8. Teacher Record Sheet – While students are working on Classwork, check each student's progress, recording the Homework mark and Challenge and Enrichment pages completed. Ensure that each student has corrected and understood any Homework mistakes.
9. Weaker/slower students – give special attention to students needing specific guidance. Encourage them to complete what they can in class and seek extra help from a parent, tutor or learning support assistant outside of class.
10. Strong, faster students – direct these students to complete the Challenge and/or Enrichment pages after the Classwork. If a student appears to already know much of the content, use the Multiple Choice Test to identify specific content gaps. Direct them to complete the Classwork lessons/pages relating to those gaps and to primarily focus on Challenge, Enrichment and Homework pages.

## SUGGESTIONS FOR THE REVISION LESSON

1. Mark and record the Homework from the previous lesson
2. Actively revise a selection of skills emphasising when to use which skill and how the concepts link together.
3. Instruct the students to:
  - a. complete the revision pages, regularly checking their work from the base of each page.
  - b. complete the crossword reviewing all terms used in the topic
  - c. check past homework errors
  - d. complete the Challenge revision for those who will sit the Challenge Test
  - e. complete any unfinished classwork or homework ready to hand in the booklet on the day the test is returned for checking and photocopying the RECORD of PROGRESS
  - f. complete any of the above for homework
4. Fast and capable students - Make a final note of students who will be sitting both the Standard and the Challenge Test. This is unnecessary if you simply attach the Challenge Test to every paper for any student to attempt after completing the Standard Test.
5. Slow, weak and frequently absent students - note which types of Homework Questions these students CAN do in order to modify the Basic Test. Asking questions that students CAN'T do will only provide negative feedback and dampen enthusiasm for learning.

## SUGGESTIONS FOR TESTING

Note: All tests are split into subsections for easy analysis and designed to comprehensively check each topic skill in a manner consistent with classwork, homework and revision.

1. Multiple Choice Test - use as a Pretest or as a final test if time is limited.  
(20 marks)
2. Standard Test - for the majority of students  
(60 marks) - reviews concepts and skills from the Classwork
3. Challenge Test - for quick and capable students  
(20 marks) - reviews concepts and skills from the Challenge pages  
- can be attached to the Standard Test or sat at a separate time
4. Basic Test - a shorter, simpler version of the Standard Test with hints and examples  
(60 marks) - for the frequently absent student  
- for the mathematically weak student Note: further test modification to the specific skills and understanding of very weak students is desirable

For an informal topic test, mark yourself or increase student learning by allowing the students to mark their own tests as you explain how to answer, set out working and award part marks. Have the students circle any questions they are unsure how to mark, for you to check later. Focus student attention on feedback for learning, rather than marks. Students can correct misconceptions, write in corrected solutions and participate in the spirit of "assessment for learning". Collect the tests for checking and recording. Marks should be viewed as indicators.

Note: Formal "summative" assessments or examinations should be sat under proper test conditions and marked only by the teacher.

## SUGGESTIONS FOR CHECKING BOOKLETS

1. When the tests are returned, provide time for students to analyse their learning and fill in every section on their STUDENT RECORD OF PROGRESS including their name, marks for each test subsection, lesson absences, strengths and areas for improvement. Collect the booklets.
2. Flick through each booklet, filling in any missing sections on the RECORD OF PROGRESS and ensuring it is consistent with the rest of the booklet.
3. Photocopy each student's RECORD OF PROGRESS and use for writing reports, parent-teacher interviews and requests for updates on a student.
4. Return the booklets to students for future reference i.e. exams, assessments, later years etc
5. Catchup - direct students to redo/complete lessons addressing areas needing improvement

## SUGGESTIONS FOR CHARGING STUDENTS

1. If using FLEXIMATHS as a textbook/workbook replacement
  - charge students the usual textbook fee to cover photocopying costs
2. If using FLEXIMATHS as a supplementary resource:
  - for extended student absences
  - for teacher absences
  - for revision, tests or worksheets
  - for further challenge and enrichment
  - for Homework
  - for selected topics
  - for capable Junior School students
  - for interrupted classes
  - for accelerants or independent learners
  - for quickly catching up to schedule
  - for self-teaching topics addressing content weaknesses in Years 8-12
  - charge students a small photocopying fee or cover using the Mathematics Budget

## CONTACT DETAILS

The full Year 7 Fleximaths system will be available for purchase in the 2007 school year. For further information contact Karen Hughes by:

Email: [essentialresources@hotmail.com](mailto:essentialresources@hotmail.com)

Post: Essential Resources  
Reply Paid 83267  
Glebe NSW 2037

Fax: Essential Resources  
02 9571 7957

# Order Form

Year 7 Fleximaths is licenced to a particular school/institution at a specific location for a calender year. During this calender year, the product can be freely printed and photocopied for student and teacher use within the institution. It can also be placed on the school intranet or emailed to any student registered at the school.

## LICENCE COSTS FOR 2007

Secondary Schools (Yr 7 up)  
Year 7 enrolment x \$10  
i.e. 50 students x \$10 = \$500



Primary Schools (K - 6)  
Year 6 enrolment x \$5

Combined Schools  
Year 6 enrolment x \$5 plus  
Year 7 enrolment x \$10

Other institutions:  
Main users x \$10

Minimum Cost \$200

To order Year 7 Fleximaths for 2007, please complete the details below:

School Name: \_\_\_\_\_

Postal Address: \_\_\_\_\_

\_\_\_\_\_ Post Code: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Position: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

Projected Year 7 enrolment: \_\_\_\_\_ x \$10 = \_\_\_\_\_

Projected Year 6 enrolment: \_\_\_\_\_ x \$5 = \_\_\_\_\_

TOTAL COST = \_\_\_\_\_

Invoice will  
accompany  
the product

Signing this form indicates acceptance of the terms and conditions of the Licence

Agreement. Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Send by Post to:

Send by FAX to:

Essential Resources OR  
Reply Paid 83267  
Glebe NSW 2037

Essential Resources  
FAX: 02 9571 7957

Essential Resources ABN 26 404 516 717