# **Process Standards Rubric**

## Algebra

	Expectations Instructional programs from pre- kindergarten through grade 12 should enable all students to:	_	2	3	70	9		erc 8	Exercise	2	Ξ	12	13 1	14 1	ار برماع النيط	Drill Sheet 1	Drill Sheet 2 Review A	Review B	J waivaA
GOAL 1: Problem Solving	<ul> <li>build new mathematical knowledge through problem solving;</li> <li>solve problems that arise in mathematics and in other contexts;</li> <li>apply and adapt a variety of appropriate strategies to solve problems;</li> <li>monitor and reflect on the process of mathematical problem solving.</li> </ul>	55			7 7 7 7		2227	> >	7777		>>>>		555	55	555			, , , ,	3 3 3 3
GOAL 2: Reasoning & Proof	recognize reasoning and proof as fundamental aspects of mathematics;     make and investigate mathematical conjectures;     develop and evaluate mathematical arguments and proofs;     select and use various types of reasoning and methods of proof.	322	Y	1	3	, 1	, ,, ,	> >	1 11 1	> >>	<i>, ,, ,</i>	> >>	> >>	5 55	> >>		, , , ,	, , , ,	3 3 3 3
GOAL 3: Communication	<ul> <li>organize and consolidate their mathematical thinking through communication;</li> <li>communicate their mathematical thinking coherently and clearly to peers, teachers, and others;</li> <li>analyze and evaluate the mathematical thinking and strategies of others;</li> <li>use the language of mathematics to express mathematical ideas precisely.</li> </ul>	1 1 1 1	, , ,				77 7 7	7 2 7 7			, , , , ,	, , ,	,		5 5 5 5		, ,	* * * * *	, , , ,
GOAL 4: Connections	recognize and use connections among mathematical ideas;     understand how mathematical ideas interconnect and build on one another to produce a coherent whole;     recognize and apply mathematics in contexts outside of mathematics.	<u> </u>	3 3		<u> </u>	> >	> >	<u> </u>	<u> </u>		<u> </u>			5.5 5			<u> </u>	, , ,	
GOAL 5: Representation	<ul> <li>create and use representations to organize, record, and communicate mathematical ideas;</li> <li>select, apply, and translate among mathematical representations to solve problems;</li> <li>use representations to model and interpret physical, social, and mathematical phenomena.</li> </ul>	<u> </u>			<u> </u>	<u> </u>	, , ,	<u> </u>	<u> </u>	<u> </u>	<u>, , ,                                </u>	<b>\</b>	5 5 5	<u> </u>	<u> </u>		<u> </u>		



## **Teacher Guide**

Our resource has been created for ease of use by both **TEACHERS** and **STUDENTS** alike.

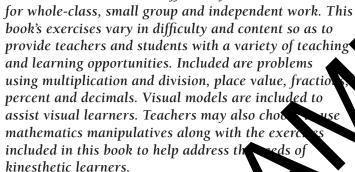
#### Introduction



ur resource offers ready-to-use worksheet activities for students in grades three to five.

Math concepts outlined by the NCTM are presented in a way that encourages students to learn and review important concepts.

Our resource can be used effectively



### How Is Our Resource Organized?

#### STUDENT HANDOUTS

Reproducible **task sheets** and **drill sheets** make up the majority of our resource.

The **task sheets** contain challenging problem-solving tasks, many centered around 'real-world' ideas or problems, which push the boundaries of critical thought and demonstrate to students why mathematics is important and applicable in the real world. It is not expected that all activities will be used, but are offered for variety and flexibility in teaching and assessment. Many of the task sheet problems offer space for reflection, and opportunity for the appropriate use of technology, as encouraged by the *NCTM's Principles & Standards for School Mathematics*.

The **drill sheets** are provided to help students with their procedural proficiency skills, as emphasized by the *NCTM's Curriculum Focal Points*.

#### The NCTM Content Standards Assessment Rubric

(*page 4*) is a useful tool for evaluating work in many of the activities in our resource. The **Reviews** (*pages 24-26*) are divided by grade and can be used for a follow-up review or assessment at the completion of the unit.

#### PICTURE C'ES

This resource water is three main types of pages, each with a different purpose and w.z. A **Picture Cue** at the top of each age shows, at wance, what the page is for.

# 9

#### la cher aide

• Inhalation and tools for the teacher

### Student Handout

• Reproducible worksheets and activities

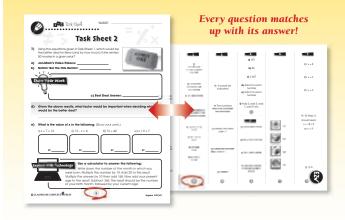


#### Easy Marking<sup>™</sup> Answer Key

• Answers for student activities

#### EASY MARKING™ ANSWER KEY

Marking students' worksheets is fast and easy with this **Answer Key**. Answers are listed in columns – just line up the column with its corresponding worksheet, as shown, and see how every question matches up with its answer!



## Task Sheet 2

2) Using the equations given in Task Sheet 1, which would be the better deal for Kerry (and by how much) if she rented 50 movies in a given year?



- a) Jon-Mark's Video Palace: \_\_\_\_\_
- b) Nothin' But the Hits Rental::



- d) Given the above results, what factor could be important when deciding which would be the better deal?
- e) What is the value of x in t

i) 
$$x + 7 = 12$$

$$=$$
  $\langle$ 

iii) 
$$7x = 42$$

iv) 
$$x / 9 = 7$$

x: \_\_\_\_\_

**x**:\_\_\_\_\_

x: \_\_\_\_\_

x: \_\_\_\_\_

### Explore With Technology

### Use a calculator to answer the following:

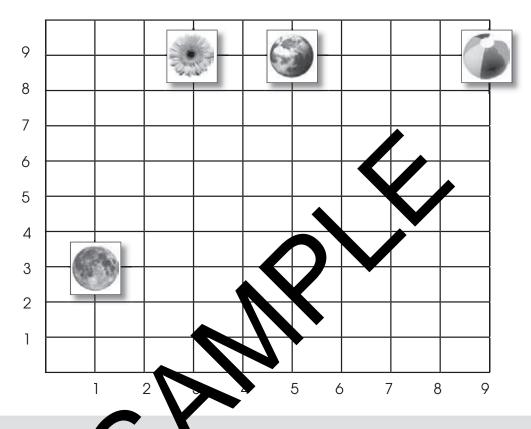
Write down the number of the month in which you were born. Multiply this number by 10. Add 20 to this result. Multiply the answer by 10 then add 165. Now add your present age to the result. Subtract 365. The result should be the number of your birth month, followed by your current age!



NAME: \_\_\_\_\_

## Task Sheet 6

6a) From the following graph, give the coordinates for the four objects indicated.



Coordinates	)
-------------	---







