Process Standards Rubric

Measurement

	Expectations Instructional programs from pre- kindergarten through grade 12 should enable all students to:	-	2	3	4	بر آ	9	Ker 7	Exercise	; e 10	0 11	1 12	. 13	14	15	Drill Sheet 1	Drill Sheet 2	A wsivsA	Review B	D waivaA
GOAL 1: Problem Solving	 build new mathematical knowledge through problem solving; solve problems that arise in mathematics and in other contexts; apply and adapt a variety of appropriate strategies to solve problems; monitor and reflect on the process of mathematical problem solving. 	77				555		, , ,	, , ,	2 2 2		7 7 7	7 7 7	> >	<u> </u>	<u> </u>	<u> </u>	> > >	> > >	> > >
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. 	, ,							, ,		, , ,	> >	> > >	> >	> > >		<u> </u>	> >	> >	> >
GOAL 3: Communication	 organize and consolidate their mathematical thinking through communication; communicate their mathematical thinking coherently and clearly to peers, teachers, and others; analyze and evaluate the mathematical thinking and strategies of others; use the language of mathematics to express mathematical ideas precisely. 	55 5										, , , ,	<u> </u>	, ,	<u> </u>	<u> </u>	<u> </u>	`	` ` `	` ` `
соллеснопя 4:	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 3	*	V . >			<u> </u>	<u> </u>	> > >	<u> </u>	` `	` `
GOAL 5: Representation	 create and use representations to organize, record, and communicate mathematical ideas; select, apply, and translate among mathematical representations to solve problems; use representations to model and interpret physical, social, and mathematical phenomena. 							,					<u> </u>	<u> </u>	<u> </u>				<u> </u>	`



Teacher Guide

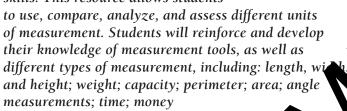
Our resource has been created for ease of use by both **TEACHERS** and **STUDENTS** alike.

Introduction



easurement is one of the major skills that students are expected to learn in the

elementary grades. The following resource provides students the opportunity to learn, review, and master essential measurement skills. This resource allows students



Students will be asked to use standard as well a measures of measure as they practice these measurement skills.

Teachers may use this resource is my man or they wish. Each sheet may be done independently or in sequence to develop essential need term to skills that students need to master by the time they have completed fifth grade. The variety of activities approvide ample opportunity for all students to learn these skills.

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 Curriculur Focal Points*.

The **NCTM** (**inter**) **Standards Assessment Rubric** (page 4) is a use of cool for valuating work in many of the activities in our record of the **Reviews** (pages 24-26) are divided by grade and can be used for a follow-up review or accessment at the completion of the unit.

PIC URE CUES

It is resource contains three main types of pages, each with a later of the ferent purpose and use. A **Picture Cue** at the top of each page shows, at a glance, what the page is for.



Teacher Guide

• Information and tools for the teacher



Student Handout

• Reproducible worksheets and activities

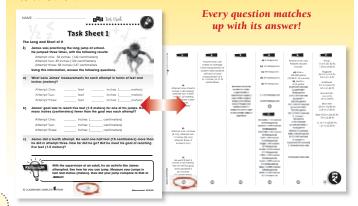


Easy Marking[™] Answer Key

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 5

That animal weighs a ton!

Tierza is volunteering at the Central City Zoo during the summer. She is helping to make charts that will be placed on animal exhibits. Her job is to list the weight of animals in terms of pounds, ounces and kilograms. She has recorded the following animal weights in pounds. Help her determine how many ounces and kilograms each animal weighs by converting pounds to ounces and kilograms.



• Animal	Weight in pounds	Weight in Junces	Weight in Kilograms
a) Hairy Armadillo	1 poun		
b) Baboon	40 punds		
c) Chinchilla	2 pour ax		
d) Whistling Duck	De 126 8		
e) Bald Eagle	6 ps unds		
f) Koala	26 pounds		
g) Otter	12 pound		
h) Trumpeter S	25 pounds		
i) Tiger	240 pounds		
j) Gray Wolf	70 pounds		

Explore With Technology

Using a zoo or animal website, find the weight of two other animals that might also be found at the Central City Zoo. Write their weight in pounds, ounces and kilograms below.

Animal	Weight in pounds	Weight in ounces	Weight in Kilograms

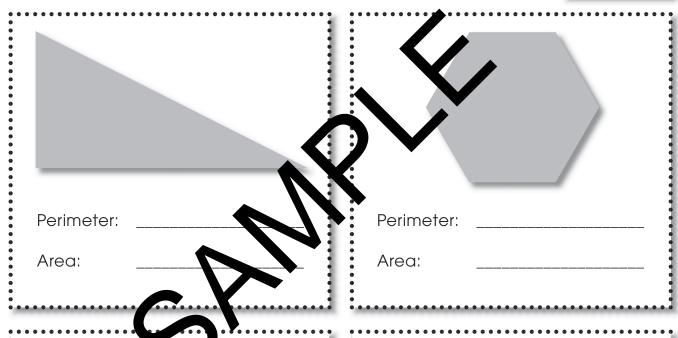




Task Sheet 14

Shape Up

14) For this activity, you will need an inch or centimeter ruler. Your job is to measure the three shapes below. Label the length of each side. Then, when you are done measuring the objects, use your data to help you calculate the area and perimeter of each object.



Perimeter:

Area: _____

Draw a shape of your own in the space below. Then, determine the area and perimeter of the shape.

Perimeter: _____

Area: _____