

Process Standards Rubric

Geometry

Expectations Instructional programs from pre-kindergarten through grade 12 should enable all students to:		Exercise															Drill Sheet 1	Drill Sheet 2	Review	Review	Review
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
GOAL 1: Problem Solving	<ul style="list-style-type: none"> 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. 	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
GOAL 2: Reasoning & Proof	<ul style="list-style-type: none"> 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. 	✓		✓					✓	✓			✓	✓							
GOAL 3: Communication	<ul style="list-style-type: none"> 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. 	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓		✓		✓	
GOAL 4: Connections	<ul style="list-style-type: none"> 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. 	✓	✓	✓	✓		✓			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 5: Representation	<ul style="list-style-type: none"> 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. 	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓



Teacher Guide

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

Introduction



Our resource provides ready-to-use worksheet activities for students in pre-kindergarten

through second grade. Our resource meets the geometry concepts addressed by the NCTM and encourages the students to learn and review the concepts in unique ways. Our resource can be used with the whole class, small group, or as independent work. The activities vary in difficulty and content and enables teachers and students to have a variety of teaching and learning opportunities. Included in our resource are activities on two- and three-dimensional shapes, fractions, coordinate points, and composing and decomposing shapes. Visual models and concrete examples are provided to assist visual learners. Teachers may also use manipulative models, such as pattern blocks, to assist kinesthetic learners in presenting the exercises in this book.



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 **Review** (pages 24-26) is divided by grade and can be used for a follow-up review or assessment at the completion of the unit.

PICTURE CUE

This resource contains three main types of pages, each with a different 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

How Is Our Resource Organized?

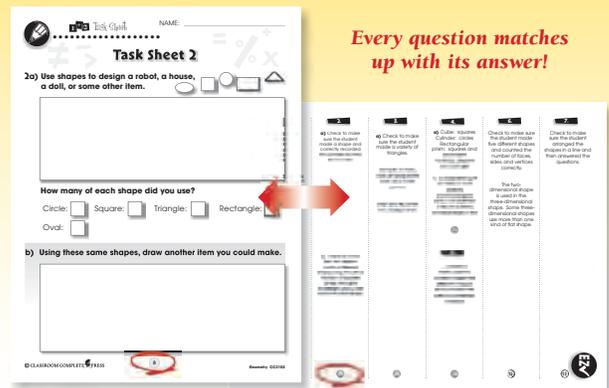
STUDENT HANDOUTS

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*.

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 1

1) As Anna looks around her playroom, she sees many different shapes. Some of the shapes have zero sides. Some of the shapes have three or more sides. What shapes can be found in Anna's playroom?



SAMPLE



Reflection

Explain how Anna might want to sort the shapes she sees. What would each group of shapes have in common?

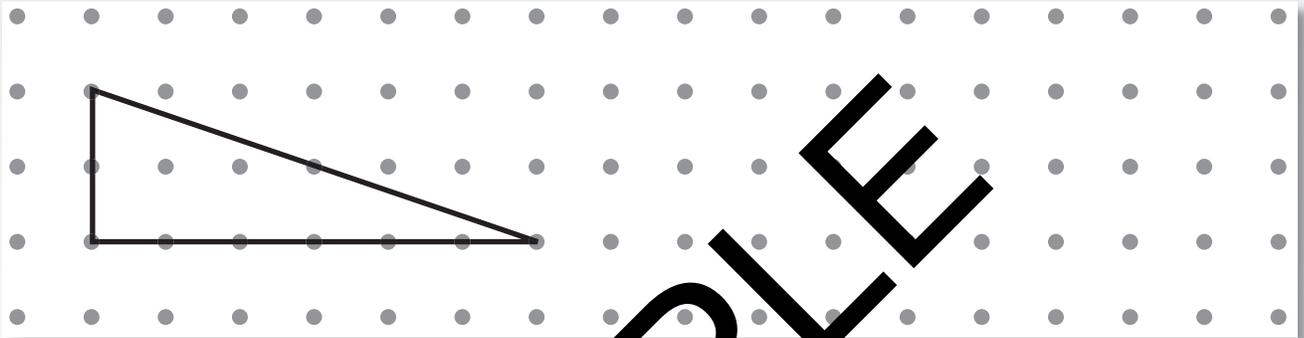
NAME: _____



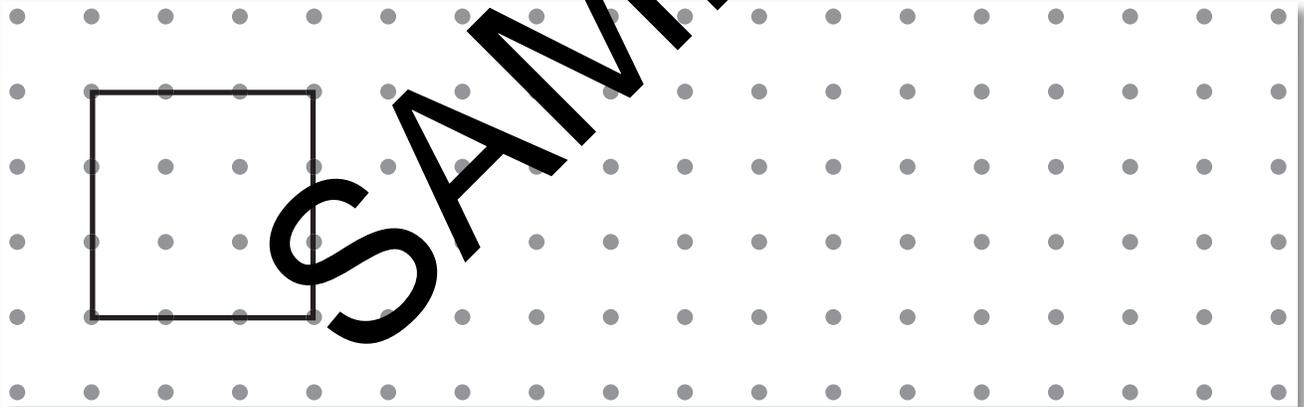
Task Sheet 11

11) Congruent means two items that are the same size and the same shape. Draw the congruent shape.

a) Triangle



b) Draw the same shape but smaller. Square.



c) Draw the same shape but larger. Rectangle.

