

3RD GRADE

POWER



Problems & Homework Edition

Name: _____

POWER PROBLEMS
HOMEWORK 3.G.1

Answer each question below.

1.) Draw three quadrilaterals that are not rectangles and that are different from each other.	2.) Fill in the blanks using these words: parallelogram, rectangle. All _____ are _____, but not all _____ are _____.
3.) Mystery shape: I have four sides. Each side is straight. My opposite sides are parallel to each other. I do not have any right angles. What shape am I?	4.) Draw a quadrilateral that does not have any parallel sides.

Name: _____

POWER PROBLEMS
HOMEWORK 3.G.2

Answer each question below.

1.) Divide the circle into eight equal pieces. 	2.) You have two chocolate bars. You divide each bar into four pieces. You give six pieces to a friend. What fraction of one chocolate bar do you have left?
3.) Can you find three different ways to divide a square into sixths? 	4.) Tasha cut her birthday cake in half. Then, she cut each half into three pieces. Each piece is what fraction of the whole cake?

Name: _____



POWER PROBLEMS
HOMEWORK 3.G.1

Answer each question below.

1.) Draw three quadrilaterals that are not rectangles and that are different from each other.

2.) Fill in the blanks using these words: parallelogram, rectangle.

All _____ are _____, but
not all _____ are _____.

3.) Mystery shape: I have four sides. Each side is straight. My opposite sides are parallel to each other. I do not have any right angles. What shape am I?

4.) Draw a quadrilateral that does not have any parallel sides.

SAMPLE

POWER Problems HD

What is included?

- 8 conceptual based math questions
- Quality prompts and word problems that promote rigorous thinking
- 4 questions per standard
- Each standard is formatted to one page
- Easy prep
- Answer keys

WHAT ARE POWER PROBLEMS?



PURPOSEFUL - These problems are meant to keep students focused, while strengthening initiative and perseverance.



OPPORTUNITIES - These prompts can be used in a variety of ways. P.O.W.E.R problems can be used to introduce a lesson, spiral review, or as formative assessments.

WITH



ENGAGEMENT - Power Problems are real word applicable and designed to hook students with interest and presentation. The complexity of problems promotes problem solving skills.



RIGOR - Tasks are specifically designed to challenge students and assess conceptual understanding of curriculum versus procedural understanding. Students will need to apply more than just a "formula."

WHY USE POWER PROBLEMS?

BUILD STAMINA WITHIN
YOUR STUDENTS



MORE THAN JUST A COOKIE CUTTER TEXTBOOK APPROACH

- P.O.W.E.R problems are designed to challenge your students with their open ended presentation. Majority of problems that come from textbooks and workbooks assess procedural understanding of curriculum. Some textbooks even provide step by step instructions where the textbook is thinking for the students and taking away that "productive struggle" for children. When we rob students of that event, we rob them of their ability to reason, problem solve, and see beyond a standard algorithm. P.O.W.E.R problems are meant to show students that there are different ways to answer one question in math. With these tasks students take ownership and are part of the problem solving process versus filling in blanks in a textbook.

HOW TO USE POWER PROBLEMS

YOUR KIDS. YOUR
CHOICE. FLEXIBILITY.



TO INTRODUCE A LESSON - P.O.W.E.R problems can be used to introduce a new skill. In this case your students will experience a "productive struggle." Their problem solving skills and prior knowledge will kick in. Often times most of my students will have the incorrect answer or no answer at all. I then have someone explain their method/reasoning and allow my students to critique their peer's answer. This makes for great accountable talk discussions. If I see that most students do not have an answer I will assist the class in getting to a specific point and then allow them to finish independently.



SPIRAL REVIEW - Avoid your students forgetting standards by using P.O.W.E.R problems to spiral review previously taught lessons.



FORMATIVE ASSESSMENTS - You can use these problems to assess mastery and levels of understanding.