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Introduction

Each book in the *Power Practice*™ series contains over 100 ready-to-use activity pages to provide students with skill practice. The fun activities can be used to supplement and enhance what you are already teaching in your classroom. Give an activity page to students as independent class work, or send the pages home as homework to reinforce skills taught in class. An answer key is provided for quick reference.

Math Logic & Word Problems 3–4 provides activities that will directly assist students in practicing and solving logic and problem-solving challenges, as well as reinforcing math skills such as decimals, fractions, addition, subtraction, multiplication, division, graphing, time, and probability. The book is organized by the National Council of Teachers of Mathematics (NCTM) standards and contains motivating activities that cover number and operations, algebra, geometry, measurement, and data analysis and probability.

The activities include various types of logic questions. The activities are grouped in “sets” that cover each type of question. The first activity page of each set includes a brief explanation of which strategies to use to complete the problem. These pages include a section called “Strategic Steps” that explain how to solve the problem. The subhead “Show Me the Way” identifies these pages. The remaining pages offer students a chance to independently practice using the strategies and steps to solve similar problems.

Use these ready-to-go activities to “recharge” skill review and give students the power to succeed!

Jelly Beans

SHOW ME THE WAY

Bryan and Andy bought a bag of jelly beans and told their brother, Warren, that he could have the jelly beans if he could tell them how many were in the bag. They gave him the following clues:

- There are more than 20 jelly beans but less than 30 jelly beans.
- You can divide the jelly beans equally into groups of 3.
- If you divide the jelly beans into groups of 5, there will be 2 left over.

How many jelly beans are there? _____

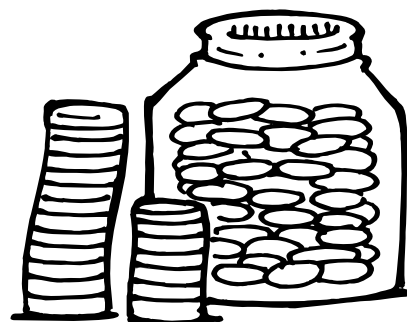
Strategic Steps

- 1 The first clue gives you a range in which the correct number is located. Write the possible numbers in that range here:

- 2 The second clue tells you that the number is a multiple of 3. Cross out the numbers in step 1 that are not multiples of 3.
- 3 The third clue tells you that the number is two more than a multiple of 5. Look at the remaining numbers. Which one of those numbers is two more than a multiple of 5?



The Penny Jar



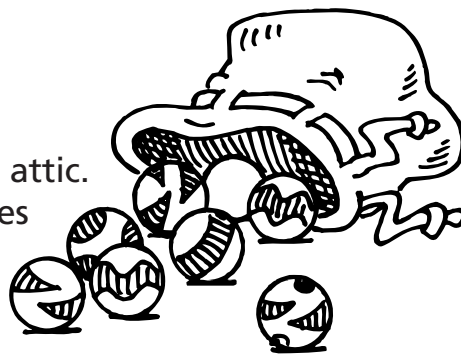
Wendy found a small jar with pennies and counted them. Then she challenged her brother, Cyrus, to guess how many pennies she had. She gave him these clues to help out:

- The number of pennies is between 30 and 60. You can divide the pennies equally into groups of 5.
- If you divide the pennies into groups of 10, there will be 5 pennies left over.
- If you divide the pennies into groups of 4, there will be 3 pennies left over.
- If you divide the pennies into groups of 3, 6, or 9, there will be 1 penny left over.

How many pennies are in the jar? Show how you found your answer.

Marbles

Nicole and Carson found a bag of marbles in Grandma's attic. Nicole counted them and gave Carson the following clues to identify how many marbles are in the bag:



- There are more than 50 marbles but less than 70.
- You can divide the marbles equally into two, three, or six groups.
- If you divide the marbles into five groups, there will be 4 marbles left over.
- If you divide the marbles into four groups, there will be 2 marbles left over.

How many marbles are in the bag? Show how you found your answer.

Who Is Older?

SHOW ME THE WAY

Hannah, Mike, Rachel, Matthew, and Emma were all born in the same year and were trying to figure out who is the oldest. Their birthdays are in January, February, March, April, and May.

Here are some clues they used to answer their question:

- Mike's birthday is between Hannah's and Emma's birthdays.
- Matthew has the first birthday in the group.
- Hannah's birthday is two months after Matthew's.



When is each child's birthday?

Hannah _____ Mike _____

Rachel _____ Matthew _____

Emma _____

Strategic Steps

(Note: This is only one strategy. There are other ways to solve this problem.)

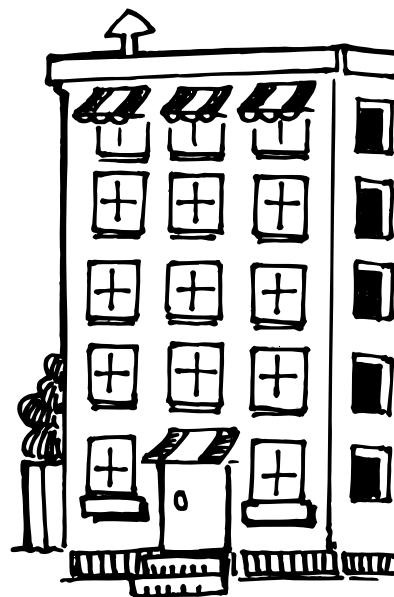
- 1 Draw a diagram that shows the months.
- 2 The second clue tells us that Matthew has the first birthday. Which month is the first month? Fill in his name next to that month on your diagram.
- 3 The third clue tells us that Hannah's birthday is two months after Matthew's. Fill in that on the diagram.
- 4 The first clue tells us that Mike's birthday is between Hannah's and Emma's birthdays. Since there is only one month before Hannah's birthday in March, that means Mike's birthday must be after her birthday and Emma's will follow that. Fill in those on your diagram.
- 5 There is only one month left empty, and that would be the month Rachel has her birthday.

Which Floor?

Five classmates—Neha, Will, Sarah, Katy, and Brodie—live in the same five-story apartment building.

Here are some clues to which floors they live on:

- When Neha visits Will, she has to go down two floors.
- Sarah lives on the floor between Katy and Will.
- When Brodie goes to Neha's to play, he goes up one floor.
- Katy lives on the first floor.



Which floor does each child live on?

Neha _____

Will _____

Sarah _____

Katy _____

Brodie _____

Classrooms

Zane, Danny, Joey, Cassandra, and Meagan were all assigned different classrooms this year. The classrooms are numbered in order going down the hall.

Here are some clues to which classrooms they are in:

- Zane is in the last classroom on the hall.
- Danny's classroom is two doors down from Zane's.
- Joey and Cassandra are next door to each other.
- Meagan's classroom is three doors up from Cassandra's.
- Cassandra is in Room 21, the lowest-numbered room.

Which classroom is each child in this year?

Zane _____

Danny _____

Joey _____

Cassandra _____

Meagan _____

