

CONTENTS

Introduction	4
Puzzles	
Angle Mazes	6
Connect the Critters	16
Skip-Counting Paths	30
Fence 'Em In	42
Fillominoes	56
Times Out	70
Product Squares	82
Arranging Squares	92
Circle Sums	110
Fraction Link	122
Abstract Art	134
Shikaku	148
Hints	163
Solutions	185

ABOUT THIS BOOK

Beast Academy Puzzles 3 contains nearly 500 puzzles in 12 different styles. Every puzzle style is aligned with the broader Beast Academy level 3 math curriculum. Whether used on their own or as part of the complete Beast Academy curriculum, these puzzles will delight and entertain puzzle solvers of all ages.

The puzzles in this book cover a broad range of topics including angle classification, skip-counting, multiplication, division, perimeter, area, and the basics of fractions and variables as taught in the Beast Academy level 3 series. The difficulty ranges from straightforward puzzles meant to give a feel for how each puzzle works to diabolical stumbers written by world puzzle champion Palmer Mebane.

WHY PUZZLES?

Entertainment

Puzzles intrigue us and capture our attention in ways that many other problems don't. What makes puzzles so captivating?

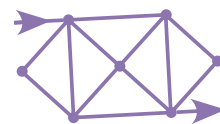
- **Breakthroughs.** The "Aha!" moments of ingenuity and insight that come when solving a well-written puzzle are energizing.
- **Satisfaction.** Not every puzzle has an "Aha!" moment of inspiration. Many involve a series of steps that are satisfying and encouraging in their own way.
- **Accomplishment.** Solving a puzzle that is just at the edge of your ability level gives a wonderful sense of achievement.
- **Gratification.** Unlike many other problems you face, it's often immediately obvious when you've solved a puzzle correctly.

Enrichment

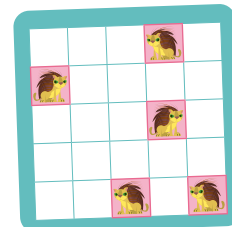
Solving puzzles makes us smarter. What do we learn?

- **Problem Solving.** The skills we learn by solving puzzles—observing, testing, fiddling, and making connections—help us become better, more resilient problem solvers in other areas.
- **Math Skills.** Every puzzle in this book was written to reinforce specific math skills. Puzzles take the monotony out of skill drill and make practice fun.
- **Spatial Reasoning.** Many puzzles require elements of path tracing or grouping that help us build spatial awareness.
- **Pattern Recognition.** Solving puzzles helps us recognize patterns and encourages us to search for new ones.

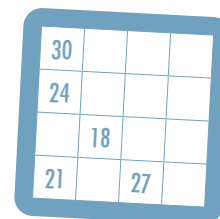
Angle Mazes



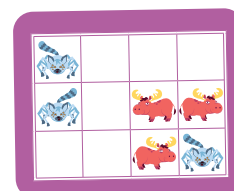
Connect the Critters



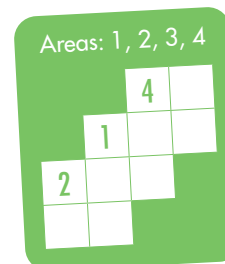
Skip-Counting Paths



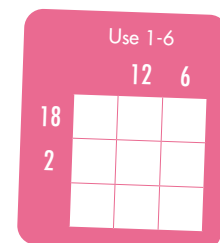
Fence 'Em In



Fillminoes



Times Out

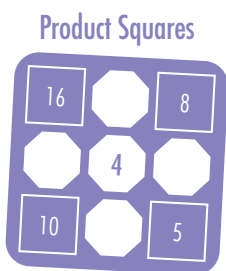
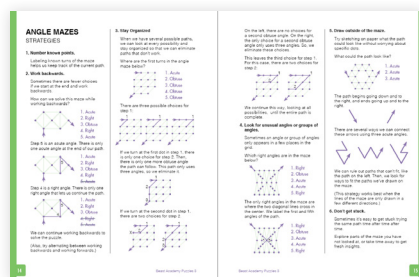
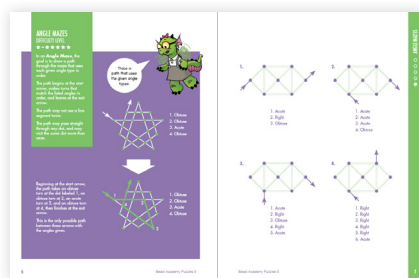


USING THIS BOOK

This book is divided by puzzle type into 12 sections, followed by HINTS beginning on page 163 and SOLUTIONS beginning on page 185.

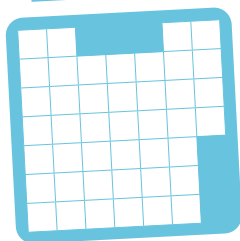
Each section includes instructions, a solved example, and difficulty ratings. The ratings at the edge of the page refer to the difficulty of the hardest problem on the page and are highly subjective.

At the end of each puzzle set is a STRATEGIES section. We highly recommend reading the strategies section even if you've already solved all of the puzzles. There may be an approach you haven't considered.

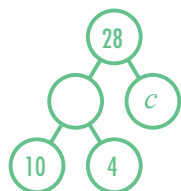


Arranging Squares

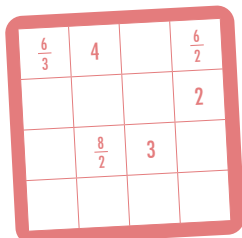
4×4 9×3



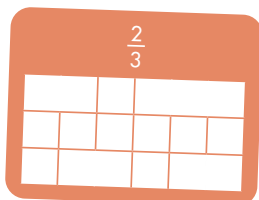
Circle Sums



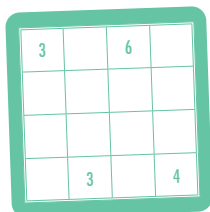
Fraction Link



Abstract Art



Shikaku



Supplementing the BA Curriculum

If you are using this book to supplement the Beast Academy math curriculum, below is a list of the different puzzle types, the chapters they supplement in BA level 3, and what math skills they reinforce.

Angle Mazes	Chapter 1	Identifying angle types. Adapted from Practice book 3A.
Connect the Critters	Chapter 1	Spatial reasoning. Find more like this in BA Online.
Skip-Counting Paths	Chapter 2	Skip-counting. Adapted from Practice book 5C.
Fence 'Em In	Chapter 3	Perimeter and area. Find more like this in BA Online.
Fillominoes	Chapter 3	Area and spatial reasoning. Find more like this in BA Online.
Times Out	Chapter 4	Multiplication and division. Adapted from Practice book 4B.
Product Squares	Chapter 4	Multiplication and division. New puzzle!
Arranging Squares	Chapter 5	Recognizing perfect squares. Find more in Practice book 3B.
Circle Sums	Chapter 7	Variables and expressions. Find more in Practice book 3C.
Fraction Link	Chapter 10	Fraction conversions. Find more in Practice book 3D.
Abstract Art	Chapter 10	Fractions. Find more like this in BA Online.
Shikaku	Chapter 12	Rectangle area. Find more like this in BA Online.