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## ABOUT THIS BOOK

Beast Academy Puzzles 2 contains over 400 puzzles in 12 different styles. Every puzzle style is part of the broader Beast Academy level 2 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 are accessible to anyone with a solid understanding of numbers and good mental addition and subtraction skills as taught in the Beast Academy level 2 series. The difficulty ranges from straightforward puzzles meant to give a feel for how each puzzle works to diabolical stumpers written by world puzzle champion Palmer Mebane.

# Honeycomb Paths 5 10 3 6

#### **Sum Blobs**



#### **Subtractiles**



#### X-Outs

		Sum	: 30		
	11	12	3	4	
	10	10	10	5	
-	9	8	7	6	
	10	10	10	20	

#### **Expression Search**



#### Mismo



## WHY PUZZLES?

#### **Entertainment**

Puzzles encourage marathon sessions of critical thinking in ways that many other problems don't. What makes puzzles so captivating?

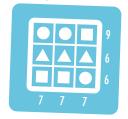
- **Breakthroughs.** The "Aha!" moments of ingenuity and insight that come when solving a well-written puzzle are energizing.
- **Satisfaction.** Not every puzzle has an "Aha!" moment of inspiration. Many involve a series of steps that are satisfying and encouraging in their own way.
- **Accomplishment.** 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.

#### Sym-Sums



#### Measure Mazes



#### **Equation Paths**



#### 8's and 9's



#### **Numbercross**



**Cross Sums** 

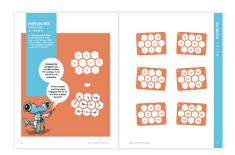


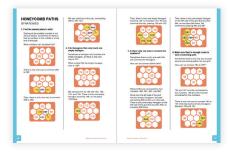
### USING THIS BOOK

This book is divided by puzzle type into 12 sections, followed by HINTS beginning on page 153 and SOLUTIONS beginning on page 169.

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.





#### **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, where they appear in Beast Academy level 2, and what math skills they reinforce.

Honey	/comb	<b>Paths</b>

Sum Blobs
Subtractiles
X-Outs

Expression Search

Mismo Svm-Sums

Measure Mazes
Equation Paths

8's and 9's

Numbercross Cross Sums 2A Practice Chapter 2

2A Practice Chapter 3

2B Practice Chapter 4

2B Practice Chapter 4

2B Practice Chapter 5

2B Practice Chapter 5

2B Practice Chapter 6

2C Practice Chapter 7
2C Practice Chapter 8

2C Practice Chapter 9

2D Practice Chapter 10

2D Practice Chapter 11

Comparing and ordering whole numbers.

Adding more than two whole numbers.

Subtracting whole numbers.

Adding and subtracting whole numbers.

Simplifying and evaluating expressions.

Writing and evaluating expressions.

Guess-and-check problem-solving strategy.

Using a ruler to measure in centimeters.

Simplifying and evaluating expressions.

Adding odds and evens.

Reading and writing large numbers.

Using the standard addition algorithm.