

Worksheet 3

Theme: Mystery Geometry Investigation

Name:

Class:



Case File 1: Clue Collector – Shape Hunt at the Museum

Instructions: The Shape Museum was robbed! Look at the exhibit signs and match each description to the correct shape name. Write your answers below.

Clue Tag	Exhibit Description	Shape Name
#1	I have 6 equal sides and no curves.	_____
#2	I'm long, have 4 sides, and 2 pairs of equal lengths.	_____
#3	I look like a slice of pizza and have 3 sides.	_____
#4	I have no corners or straight lines. I'm perfect for a wheel.	_____



Case File 2: Identify the Suspect Angles!

Instructions: Circle the correct type of angle based on the clues. Then draw one example of each in the space provided.

1. The **angle that looks like the corner of a square** is called:

☐ Acute ☐ Right ☐ Obtuse



Draw it here: _____

2. The **angle that opens more than a right angle** is:

☐ Acute ☐ Right ☐ Obtuse



Draw it here: _____

3. The **angle that's smaller than a right angle** is:

☐ Acute ☐ Right ☐ Obtuse



Draw it here: _____



Case File 3: Perimeter Clue Cards

Instructions: Calculate the perimeter of each clue card. These cards were dropped by the shape thief!

Clue Card	Side Lengths	Formula Used	Perimeter
Card 1 – Triangle	5 cm, 4 cm, 6 cm	$a + b + c$	_____ cm
Card 2 – Square	7 cm each	$4 \times \text{side}$	_____ cm
Card 3 – Rectangle	9 cm, 3 cm	$2 \times (L + W)$	_____ cm



Case File 4: The Shape Shadow Puzzle

Instructions: Match the **object** to its **shadow shape**. Then, write how many **sides** and **angles** it has.

Object	Shadow Shape	Sides	Angles
Stop Sign	_____	_____	_____
Door	_____	_____	_____
Ice Cream Cone	_____	_____	_____
Book Cover	_____	_____	_____



Case File 5: Sketch the Culprit's Hideout

Instructions: Based on clues, sketch the hideout using **only geometric shapes**. Use a square window, a triangular roof, a rectangular door, and a circular satellite.

Label each shape and count total sides and angles.



Total Shapes Used: _____



Total Sides: _____



Total Angles: _____



Bonus Mystery: Shape Riddle Cipher

Riddle:

I'm made of four sides, but not all are the same.

Two are long, two are short, that's my name.

What am I? _____