THE CASE OF COMMON CHRIS

YOUR MISSION:
Calling Odd Squad! Common Chris is on his way to steal objects from your room and all common shapes are at risk! In order to crack the case, kids will explore how shapes can be composed of other shapes and use this knowledge to stop Chris in his tracks before he swipes your most commonly-shaped objects.

LEARNING GOALS:
- Identify common shapes by their unique features (attributes): rectangle, square and triangle.
- Discover that single shapes can be composed of many shapes. For example, a square can be composed of two triangles.

MATERIALS:
- Handout: Shapes Sheet
- Masking/painter’s tape or string
- Scissors (one pair per child)
- A plain manila folder to use as the case file. You can attach the Odd Squad Seal (included in this packet) to the front and put the activity pages inside.

PREPARATION:
- Find the Odd Squad episode Crime at Shapely Manor (approx. 22 minutes) online at pbskids.org/learn/oddsquad/afterschool.
- Print the Shapes Sheet (one per child).
- Prepare your case file.
IMPLEMENTING THE ACTIVITY:

- Help the children settle down by completing a fun, focusing task that explores shapes. Ask them to close their eyes and quietly concentrate as you describe a shape aloud and to use their fingers to draw the shape in the air. Kids will have fun varying the size of their “air drawings” each time.

- Once the children are focused, view the episode Crime at Shapely Manor with the group. Before you begin, ask the children to pay attention to the shapes in the episode. After you watch, ask: What did Olive and Otto learn about shapes? (Shapes can be composed of other shapes.)

- Let the children know that you’ve received a letter from the head of Odd Squad, Ms. O. Explain: Odd Squad needs our help. Are you ready to help crack a math case? Read the letter from Ms. O aloud (below).

- Engage the children in Training and Casework, then celebrate with a Case Closed learning recap (following pages).

Letter from Ms. O

Agents! There you are! Something very odd has happened. Common Chris is at it again, stealing the world’s most common objects for his Common Collection. This time he’s after common shapes, and he’s coming your way! Common Chris has already figured out the most common shape in your room, and when he shows up, he’s going to take everything that is that shape! So SHAPE UP, Agents! You’ve got to trick Common Chris by making the most common shape in your room... less common. I’m sure you can figure out how to do it. So, are you on the case? Then hurry, because Odd Squad needs you!

TRAINING:

1. Let the children know that in order to crack The Case of Common Chris, they are going to need to know a lot about shapes. Give each child a Shapes Sheet handout. Describe a shape on the page and ask the children to point to and name the shape you are describing. You can describe each of the three different shapes by talking about the number of sides, their corners and angles, etc.

2. Now have the children cut out the shape pieces. As they cut, tell them that shapes can be tricky: smaller shapes can work together to compose, or create, other shapes. Hold up two triangles and put them together to make a square. Ask: What shape did I make using these two triangles? (A square.) See? A square can be composed of two triangles.

3. Have the children experiment with putting their shapes together in different ways to see what new shapes they can compose. They can use the line art drawing as a guide for how the shapes may fit together.

4. Gather and discuss the children’s findings. For example: Look, a rectangle can be composed of a square and two triangles. A large square can be composed of one rectangle, one square and two small triangles. Show them the line art drawing at the top of the shapes sheet and discuss how all the shapes together compose one large rectangle.
**CASEWORK:**

1. Tell the children that it’s time to crack The Case of Common Chris. Say: *Before we trick Common Chris with our shape composition skills, we’ll first need to identify the most common shape in our room. That way we’ll know which shape Common Chris is planning to steal.*

2. Draw each shape on the blackboard (square, rectangle, triangle), then have the children go on a shape hunt around the room. As they discover different shapes in everyday objects, they can make a tick mark within each shape on the board. To help them get started, you might point out that the cover of a book is a rectangle and that a door is a rectangle, too.

3. Gather and tally your results. Ask: *Which is the most common shape in our room?* (Most likely, it will be a rectangle.)

4. In teams, or together as a group, go around the room and transform the rectangles (or whatever the most common shape was determined to be) into other shapes. Begin with your door: place a strip of masking tape or string diagonally across the door. Ask: *Now what shapes will Common Chris see?* (Two triangles.) Continue using the tape or string to create other shapes within the most common shape around the room. If children get stuck, encourage them to think of all the ways they used their shapes to compose rectangles and other shapes.

**CASE CLOSED:**

Gather your agents into a group.

Say: *Great work, agents! Common Chris will never spot the rectangles in our room now. As part of our training, we like to review what we learned from the case and enter it in the case file so that future agents-in-training can learn from it.*

Ask: *What did we learn about shapes? What does a rectangle/triangle/square look like? What are different ways we can make, or compose, a rectangle?*

Write down the learnings/findings that the children share, close your case file and write **CASE CLOSED** across the front. Congratulate your agents on a case well-solved.
THE CASE OF COMMON CHRIS

SHAPES SHEET
THE CASE OF COMMON CHRIS

ODD SQUAD SEAL

The contents of this activity were developed under a grant from the Department of Education. However, these contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government. (PR/Award No. U295A100025, CFDA No. 84.295A).

Odd Squad © 2015 The Fred Rogers Company. PBS KIDS and the PBS KIDS Logo are registered trademarks of Public Broadcasting Service.