Ms. O’s Coldest Cases

Your Mission:
It’s not just one, but four cases for the Odd Squad…and they’re very, very cold. These cold, old mysteries have long been sitting on the shelves of the cold case vault, and agents will need to use their deductive reasoning skills to sort through Obfusco’s totally confusing notes, find the critical information and finally put things right again.

Learning Goals:
- Break a problem into a set of steps.
- Identify relevant information.
- Build deductive reasoning skills.

Materials:
- Handout: Cold Case Cards
- Scissors
- Paper
- Pencils
- 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 Agent Obfusco (approx. 11 minutes) online at pbskids.org/learn/oddsquad/afterschool.
- Print out the Cold Case Cards (one set of cases for every two children).
- Prepare your case file.
IMPLEMENTING THE ACTIVITY

- Help children settle down by completing a fun, focusing task that explores deductive reasoning. Say: *I am thinking of a number. It is higher than 1 but less than 10. It is an odd number. It is my favorite number. It is 2 digits higher than 3. Can you guess my number?* (5). You can play this game a few times with other numbers and other clues to introduce kids to sorting and processing information in a fun way.

- Once children are focused, view the episode *Agent Obfusco* with the group. Before you begin, ask children to pay attention to the ways that Olive and Otto figure out what information is important to a case and what information is not important, and how they use the important information to help solve a problem. After you watch, ask: *What were the strategies that Olive and Otto used to solve the problems in the Math Room?*

- Tell children that you’ve received a letter from the head of Odd Squad, Ms. O. Explain: *The 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. Are you freezing? If not, you will be soon, because I’m going into the vault and taking out all of the cold cases. These are cases we’ve never been able to solve, probably because Agent Obfusco is the one who wrote the case notes and they are hopelessly confusing. But now it’s your job to crack these cold cases. You’ve got the skills to decide which information is important and which information is NOT important. The question is, are you ready? Then hurry, because Odd Squad needs you!

**TRAINING:**

1. Let children know that in order to crack *Ms. O’s Coldest Cases* they will need to pay close attention to the information they are given and decide which information is important.

2. Call three children to the front of the room. Say: *One of these students has a giant box of gold in his or her desk. Now write the clues on the board to help children figure out which student it is. You might write:* “Someone with a nose has the gold. The person with the gold has a birthday once a year. The person with the gold is the one with the longest hair.”

3. Read the clues aloud and ask children to identify the important information. Ask questions such as: *Is it important for us to know that someone with a nose has the gold? Why not?* Using the important information, have children come up with a plan for how they will find out who has the gold.

4. Measure the hair and solve the mystery together.

5. Bring three or four more children to the front and play again with a new mystery.
1. Tell the children that it’s time to crack **Ms. O’s Coldest Cases**. Say: To crack these tricky cases, we will need to look for important information and ignore what is not important. Then, we can figure out the steps we need to take to solve the case. We’ll need to work together and we’ll need to pay very close attention.

2. Have children work in pairs. Give each pair the sheet of **Cold Cases** to solve, as well as some paper they can use to show their steps and their answers. Before the pairs begin, you may wish to choose a case and solve it together. Encourage children to cross out the information that is not important so that they can focus only on what they need to know. If the children cannot read the cards on their own, you can solve the cases as a group.

3. As the children work, encourage them to explain and show their thinking. Ask: **What is the important information? What are the steps you need to take to solve the problem? What answer or answers have you found?**

4. Invite the pairs to share their work and their answers with the whole group. If children arrived at different answers to the same problem, discuss reasons this might have happened and solve the problem together.

**CASE CLOSED:**

Gather your agents back into a group.

Say: **Great work, agents! We’ve solved The Odd Squad Cold Cases. As part of our training, we like to review what we learned from the cases and enter it in the case file so that future agents-in-training can learn from it.**

Ask: **When solving a problem, how do we decide which information is important and which is not? Once we have found the important information, what’s the next thing we can do to help solve the problem?**

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.
**ODD OCTOPUS**

The Odd Octopus has disappeared and to find him, we need to know what to look for.

He smelled like bubble gum.

He had eight legs on Monday.

He dreams of unicorns.

He lost two legs on Tuesday.

On Wednesday, he grew three legs.

How many legs does the Odd Octopus have now?

**SANDWICH SITUATION**

Someone has hidden my sandwich.

The missing sandwich is my favorite: pickles and onions.

There are six drawers in my kitchen.

Cats do not like sandwiches or onions.

The missing sandwich is not in drawer number one.

It is not in drawer number three.

It’s not in an even-numbered drawer.

Where is the sandwich?

**BYE BYE BOOK**

The characters are escaping from my book.

It is 100 pages long.

Two characters had pink hair; they escaped from page 10.

One more character escaped from page 25; he had purple eyes.

Then, six more characters escaped from page 68.

They all liked to eat ants for breakfast.

How many characters have escaped in all?

**NUMBER THIEF**

There’s a number thief on the loose.

He likes to count by three.

He took number three. He’s very tall.

He took number six.

He is a fast runner.

He took number nine.

What number is he going to take next?