

THE CASE OF THE CENTIGURPS THAT KEEP ESCAPING



YOUR MISSION:

Calling Odd Squad! Those silly Centigurps have escaped again, and this time they've moved on from Headquarters and invaded your room! Agents will need to track them down, gather them up and use skip counting skills to be sure all 100 sneaky critters have been captured.

LEARNING GOALS:

- Skip count by 2s, 5s and 10s.
- Count to a high number effectively (without having to count by ones).
- Reinforce addition and subtraction skills.

MATERIALS:

- Printable: [Centigurps Collection Boxes](#)
- Printable: [Centigurps Counter](#)
- 100 small colored pom-poms/fuzzy balls, plus a few extra
- A marker or crayon
- 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 [The Trouble with Centigurps](#) (approx. 11 minutes) online at pbskids.org/learn/oddsquad/afterschool.
- Print the [Centigurps Collection Boxes](#) and place them on a table. Fill three of the 10s boxes with the pom-poms (10 in each; 30 total).
- Print/assemble the [Centigurps Counter](#) and color the bar up to the 30 mark. Hang it on a wall or place it on the table with the [Centigurps Collection Boxes](#).
- Hide the remaining 70 pom-poms around the room, near items that are the same color, if possible. They can be placed in clusters.
- Prepare your case file.

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IMPLEMENTING THE ACTIVITY:

- Help the children to settle down by completing a fun, focusing task that explores skip counting. Gather them into a circle, standing, and have each child extend both hands, fisted. Explain that “skip counting” means counting quickly by numbers bigger than 1, and show how they can go around in a circle counting by 2s, using their two fists as a visual aid. The children can then put in one hand, fingers extended, and skip count by 5s; then two hands, fingers extended, and skip count by 10s. Once they’ve mastered the concept, play a game: **How quickly can they go around the circle, skip counting by 2s, 5s, or 10s, and still stay on track?**
- Once the children are focused, view *The Trouble with Centigurps* with the group. Before you begin, ask them to pay attention to what Oscar and Otto learn about skip counting. After you watch, ask: **How can skip counting help Olive and Otto as they work?**
- Tell the children 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. It seems that Agent Octavia got a little too curious and opened up the Centigurp Containment Unit, and now we have a complete disaster on our hands. 100 Centigurps are on the loose! Octavia managed to contain 30 Centigurps back at Headquarters, but that means there are still a lot of those crazy critters still rolling around — and they’re headed your way. I need you to figure out how many are still on the loose and capture them before they take over your room...or worse, the world! But be careful: They like to change color and hide themselves next to everyday items. So, are you on the case? Then hurry, because Odd Squad needs you!



TRAINING:

1. Tell the children that in order to crack *The Case of the Centigurps That Keep Escaping*, they first need to figure out how many are left out there to find.
2. Say: **As Ms. O told us, 100 Centigurps escaped, but 30 have already been captured. I have them here.** Show them the Centigurps Collection Boxes you’ve prepped. Here are 10...20...and 30.
3. Ask the children to look at the number line you’ve started. Say: **I’ve already colored in the Centigurps Counter up to 30. How can we use this number line to figure out how many are still on the loose?** Approaches could include: counting by 10s from 30 to 100; starting with 100 and subtracting 30; or the children may come up with another idea. This is a great opportunity to show that there are many different ways to arrive at a correct answer of 70.

continued



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TRAINING CONTINUED:

4. Direct them again to the [Centigurps Collection Boxes](#). Explain: *There are 70 Centigurps that we need to capture in our boxes. Let's think about the different boxes we could use to get to 70. Let's start with using the 10s boxes. Skip count by 10s as you point to each of the 10s boxes. There will be only five of the 10s boxes available, so that will allow for the collection of 50 Centigurps.*
5. Help children to look at the [Centigurps Counter](#) and see how many more Centigurps they'll need to collect after they fill up the 10s boxes. (30 Centigurps already collected + 50 more Centigurps = 80 Centigurps.)
6. Say: *Once we fill these 10s boxes, we'll have collected 80 Centigurps, which means we'll need to collect 20 more. But we don't have any 10s boxes left. What could we do next?* Show the children the boxes you have left, and again, have children suggest how they could fill the 5s or 2s boxes with the last 20 Centigurps.

CASEWORK:

1. It's time to start collecting! Tell the children that it's important for them to come and deposit the Centigurps in the Collection Boxes as they are found, so everyone can keep track – and that they must completely fill each box before starting a new one. Now say: *I am going to send you off to collect, but every time you hear me say 'Count up!' come back and we'll figure out how many more we need to find.*
2. Children should spread out or work together to find all the Centigurps, depositing them in the boxes as they are found.
3. A few times throughout, call for a 'Count up!'. Together, use skip counting skills to figure out how many have been collected. Each time, choose a child to color in the [Centigurps Counter](#) so the group can together determine how many more need to be found.
4. Continue until all 70 lost Centigurps have been collected. If the children can't find all the ones you've hidden, you can pull out the "extras" you kept on hand.

CASE CLOSED:

Gather the children back into a group.

Say: *Great work, agents! It looks like we've become real experts in Centigurp collecting. 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 today? How can we count to high numbers without counting by 1s?*

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.

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CENTIGURPS COLLECTION BOXES

2s

5s

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CENTIGURPS COLLECTION BOXES

10s



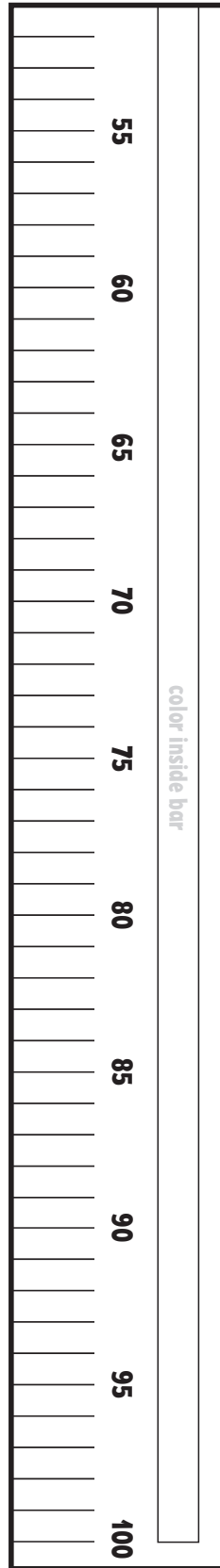
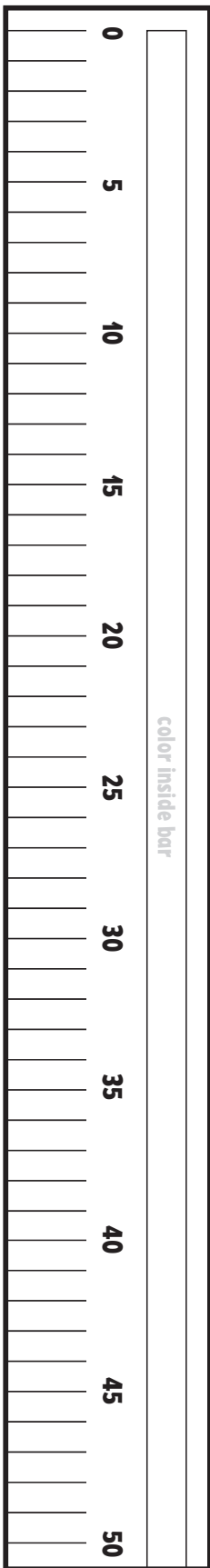
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CENTIGURPS COUNTER

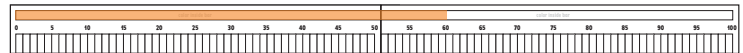
Tape the other marker to the backside of this marker.



Create a Centigurps Counter from 0-100.

Cut out the Centigurps Counter halves to the left along the heavy line. Leave a flap to tape the first half to the backside of the second half. Align the ends so the edge falls where the number 51 would be.

Sample



Tape this flap under the other marker to connect the two.



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ODD SQUAD SEAL



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