Maya's Coding Quest: Count to Win!

Grade 1 math coding-kids

Students will count to 20, count on from any number, and use counting to solve simple story problems set in a coding adventure.

Name: _____ Date: _____

1. Maya opens her coding screen. She sees 3 glowing special objects in a row. Then 2 more appear. How many special objects does Maya see now? Count them all.

2. Maya finds a unique item on her screen. It flashes 4 times. Then it flashes 3 more times. How many flashes did Maya count in all?

3. Maya's code unlocks a rare find! She counts 6 rare finds on level 1. She counts 5 rare finds on level 2. How many rare finds did Maya count in all? Show your counting.

4. Maya lines up her special objects in a row: 1, 2, 3, 4, 5, 6, 7, 8, __, __. Fill in the two missing numbers. What number comes after 9?

5. True or False: Maya counts 9 unique items. Then she finds 4 more. Maya has 14 unique items in all. Write True or False. Show your counting to check.

6. Maya reaches the hidden treasure room! She counts special objects in 2 rows. Row 1 has 8 special objects. Row 2 has 8 special objects. How many special objects does Maya count in all two rows?

7. Maya finds rare finds on 3 screen levels. Level 1: 5 rare finds. Level 2: 6 rare finds. Level 3: 4 rare finds. How many rare finds did Maya count across all 3 levels?

8. Maya cracks the final code and opens the hidden treasure chest! Inside she sees unique items numbered 1 to 20 in order. But 3 numbers fell off: 11, __, 13 and __, 16, __ are missing. Write the 3 missing numbers. Then count how many unique items are in the chest in all. Maya wins — what is her total count from 1 to 20?

Answer Key: Maya's Coding Quest: Count to Win!

GRADE 1 | TEACHER & PARENT USE ONLY

After Q6, ask students to point to the screen grid and physically tap each pixel as they count — this mirrors the skip-counting strategy children use on Q6 and Q7 and reveals which students are still counting by ones versus grouping.

1. Maya opens her coding screen. She sees 3 glowing special objects in a row. Then 2 more appear. How many special objects does Maya see now? Count them all.

Answer: Count on from 3: 3 ... 4, 5. Maya sees 3 + 2 = 5 special objects.

2. Maya finds a unique item on her screen. It flashes 4 times. Then it flashes 3 more times. How many flashes did Maya count in all?

Answer: Count on from 4: 4 ... 5, 6, 7. Maya counted 4 + 3 = 7 flashes in all.

3. Maya's code unlocks a rare find! She counts 6 rare finds on level 1. She counts 5 rare finds on level 2. How many rare finds did Maya count in all? Show your counting.

Answer: Count on from 6: 6 ... 7, 8, 9, 10, 11. Maya counted 6 + 5 = 11 rare finds in all.

4. Maya lines up her special objects in a row: 1, 2, 3, 4, 5, 6, 7, 8, __, __. Fill in the two missing numbers. What number comes after 9?

Answer: The pattern counts up by 1 each time. 8 + 1 = 9. 9 + 1 = 10. Missing numbers: 9 and 10. The number after 9 is 10.

5. True or False: Maya counts 9 unique items. Then she finds 4 more. Maya has 14 unique items in all. Write True or False. Show your counting to check.

Answer: Count on from 9: 9 ... 10, 11, 12, 13. That equals 13, not 14. 9 + 4 = 13. The answer is FALSE. Maya has 13 unique items, not 14.

6. Maya reaches the hidden treasure room! She counts special objects in 2 rows. Row 1 has 8 special objects. Row 2 has 8 special objects. How many special objects does Maya count in all two rows?

Answer: Count on from 8: 8 ... 9, 10, 11, 12, 13, 14, 15, 16. Maya counts 8 + 8 = 16 special objects in all two rows.

7. Maya finds rare finds on 3 screen levels. Level 1: 5 rare finds. Level 2: 6 rare finds. Level 3: 4 rare finds. How many rare finds did Maya count across all 3 levels?

Answer: Step 1 — add level 1 and level 2: count on from 5: 5 ... 6, 7, 8, 9, 10, 11. So 5 + 6 = 11. Step 2 — add level 3: count on from 11: 11 ... 12, 13, 14, 15. So 11 + 4 = 15. Maya counted 5 + 6 + 4 = 15 rare finds in all.

8. Maya cracks the final code and opens the hidden treasure chest! Inside she sees unique items numbered 1 to 20 in order. But 3 numbers fell off: 11, __, 13 and __, 16, __ are missing. Write the 3 missing numbers. Then count how many unique items are in the chest in all. Maya wins — what is her total count from 1 to 20?

Answer: Missing number between 11 and 13: 11 + 1 = 12. So the missing number is 12. Missing numbers around 16: the number before 16 counts up from 15, so 15 is missing. The number after 16 counts up to 17, so 17 is missing. The 3 missing numbers are: 12, 15, and 17. Total unique items in the chest: count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 — that is 20 unique items in all. Maya counted all 20 unique items and won the coding quest!