Make Ten Mistake Detectives

Someone moved counters to make ten. Did the total stay the same?
Work with a partner. Use the frames, a pencil or small objects.

A. Test two explanations

Start with 8 counters in one frame and 7 in the other.



Sam says	$8 + 7 = 10 + 7$
Jo says	$8 + 7 = 10 + 5$

Circle the equation that keeps all 15 counters. Explain the other equation.

B. Repair the mistake

A partner wrote 9 + 4 = 10 + 4. Draw or cross out counters to fix the right side.



9 + 4 = 10 + _____ **I moved _____ counter(s).**

C. Your turn

Choose two numbers from 1 to 9 with a sum above 10. Show the move.

Listen for the missing move

The learning goal is to explain why moving a counter changes both addends while preserving the total. Give each pair two ten-frames and 15 counters.

1 min

Predict

Show 8 and 7. Ask how many counters the first frame needs. Pause before moving any.

3 min

Test both claims

Read Sam’s and Jo’s equations aloud. Have one child move the counters while the other counts what remains.

2 min

Repair a new example

Give the pair 9 and 4. Ask them to change one side of the incorrect equation and justify the change.

1 min

Listen at the exit

Ask for a fresh example. Listen for both the gain in the first frame and the matching loss in the second.

ANSWER KEY

A. Jo moved two from seven. Five remain, so 10 + 5 = 15.
Sam added two without removing them and got 17.
B. Move one from four. 9 + 4 = 10 + 3 = 13. C. Example: 6 + 8 = 10 + 4.

Open the free two-frame demonstration

For adults: see the related Number Beasts game

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