

Property of zero activities



1 Add zero, take zero

Students place a group of counters, add zero (nothing), then take zero (nothing), and see the count is unchanged each time. They say the rule in one sentence.

"Add zero to your counters — did any appear? Take zero — did any go?"

"Say it: adding or taking zero leaves the number the same."

2 Zero plus a number

With numeral and symbol cards showing $0 + 5$, students say the answer and point to the counters that did not change.

"Zero plus five — what is the answer? What stayed the same?"

"Show me with counters why zero plus five is not zero."

3 How many facts does one rule give?

Run through zero plus each number and each number plus zero for 0–9, then take-zero and number-take-itself. Count how many facts one rule covers.

"Zero plus one — one. One plus zero — one. How many facts with one rule?"

"Do you need to memorise any of these? Why not?"

4 Non-example: zero swallows the number

Show two wrong claims — "zero plus five is zero" and "five plus zero is fifty." Students disprove each with counters and name the error.

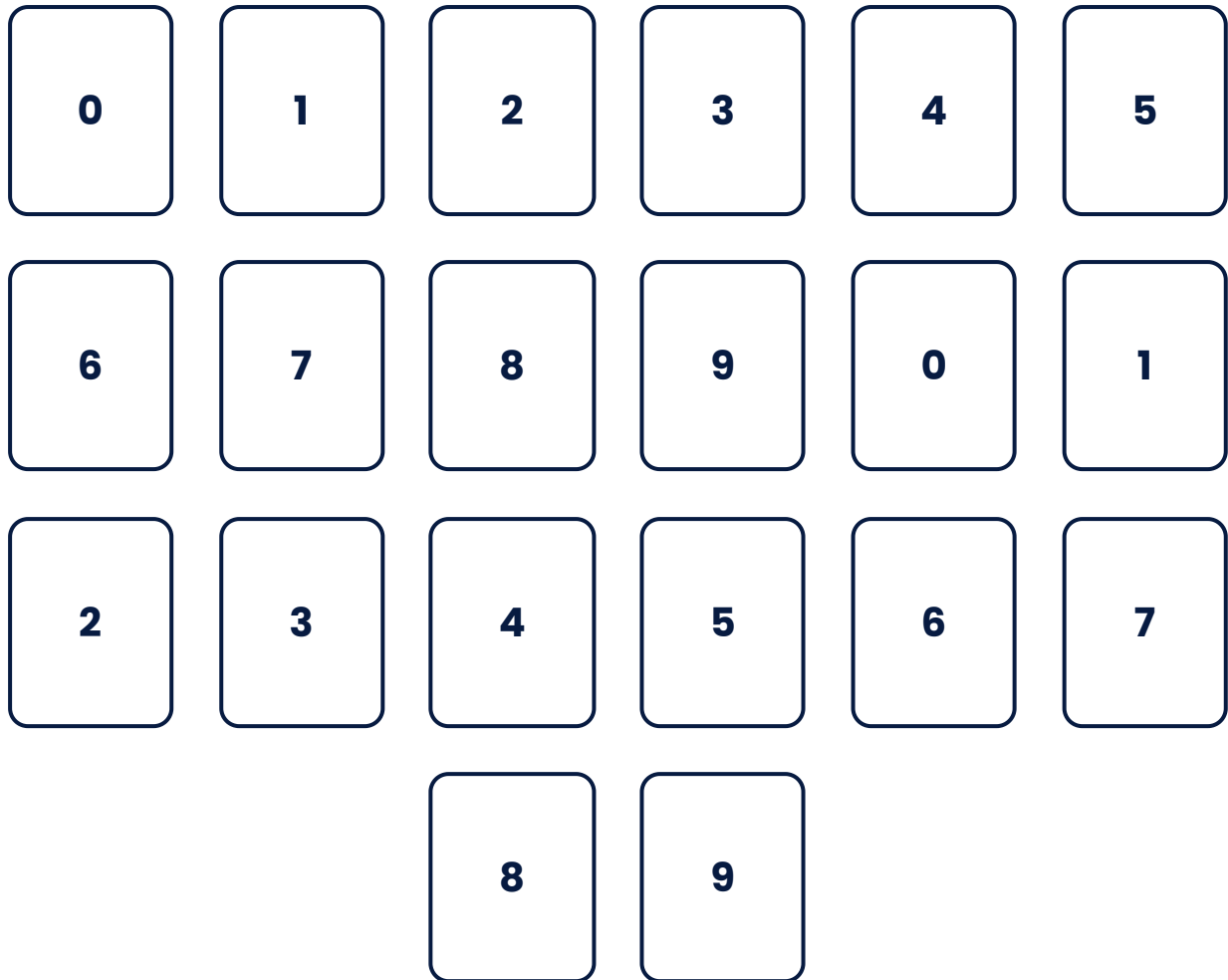
"Someone said zero plus five is zero. Show me with counters — is it?"

"Someone said five plus zero is fifty — is that a maths error or a reading error?"

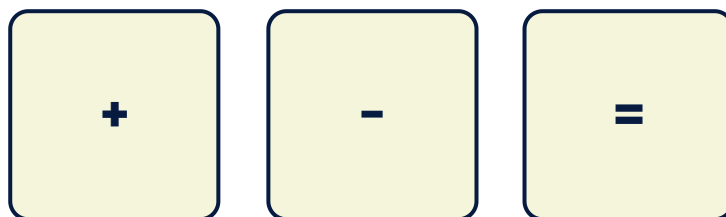
Property of zero — numeral and symbol cards



Print on A4. Cut out. Build a zero fact, then show with counters that the number does not change. (Two sets of 0–9, plus the signs.)



Signs



Property of zero — true / false cards



Print on A4. Cut out. For each card say true or false, and if it is false give the correct answer and say what error was made.

$$8 + 0 = 8$$

$$0 + 4 = 0$$

$$7 - 0 = 7$$

$$0 - 3 = 3$$

$$5 + 0 = 50$$

$$0 + 0 = 0$$

$$6 - 6 = 0$$

$$9 + 0 = 9$$