

TenPenny

(ages 5 to 7)

Goals

- Learn the meaning of addition and the shape of an addition statement.
- Learn the meaning of subtraction and the shape of a subtraction statement.
- Practice writing numbers, symbols, and addition and subtraction statements correctly.
- Inadvertently memorize the most key one-digit addition facts. Enjoy predicting.

Materials

- A sheet of 8.5 x 14" paper, a pencil, eraser, and 10 pennies per person.
- Table big enough for group to play side-by-side, but small enough for all to see everyone's work.

Preparation

- Turn paper lengthwise. Draw 10 vertical lines, 1-¼ " apart, making 11 columns of that width.
- Title the 11 columns: “ 0+10=10 1+9=10 2+8=10 ... 7+3=10 8+2=10 9+1=10 10+0=10 ”
- Fold the paper in 2 side-by-side halves.
- You can also play this game with subtraction statements: “ 10-0=10 10-1=9...10-10=0”
- When both versions, addition and subtraction, are familiar, play them both side-by-side.

Play

(The 2nd step will obviously be different for those doing subtraction sentences.)

- Take ten pennies in hands, shake them up without dropping any, and then drop all ten on paper.

- If less than all dropped, or any are not on the paper after dropping, drop all the pennies again.
- If all ten pennies dropped on your paper, then add the results to your data on the page by:

1st, separate heads onto left half of fold, buildings onto right half of fold, then make a 5-penny shape on whichever side, heads or tails, whichever side has 5 or more pennies. Invent your own shape to represent 5 pennies. Count your shape as 5.

2nd, count heads, “+”, then count tails, “=”, then count pennies, aloud, for example: “1 2 3 heads + 5 6 7 tails = 5 6 7 8 9 10 pennies.” Count your 5-penny shape as 5.

IF YOU ARE SUBTRACTING, your 2nd step will be, count heads, “-”, then count tails, “=”, then count pennies, aloud, for example: “5 6 7 8 9 10 pennies - 1 2 3 heads = 5 6 7 tails.”

3rd, find the number sentence you just said on your paper, copy its title in that column.

Repeat the process. Try to predict which of your columns will reach the bottom of page first.

When you end the game, each person tells, and shows, which column (number sentence) grew fastest to the bottom of their page, and which sentences happened the fewest times during that time.