

Number Line Race to 20 (or 10)

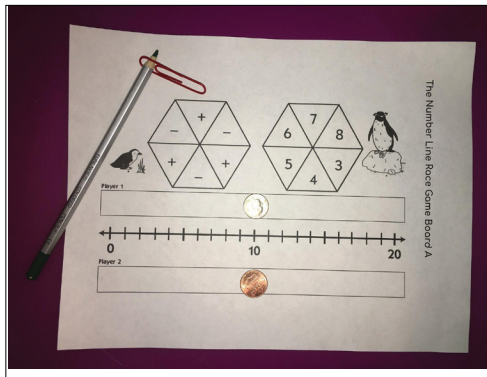
Object of the Game

For each round, players spin two spinners and move their game marker forward or backward that many spaces on the number line. The first player to land exactly on 0 or exactly on 20 wins!

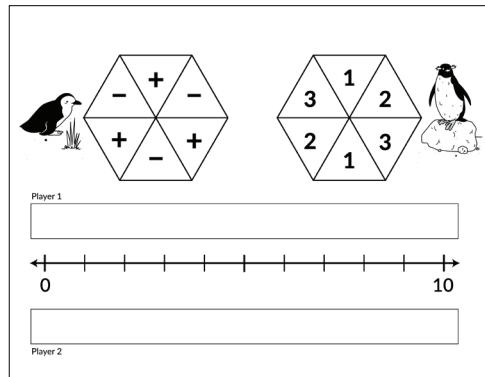
Materials

- 2 game markers
Use coins, buttons, or other small objects.
- Pencil and 1 paper clip or safety pin for the spinners
- 1 Number Line Race Game Board A or B
There are two game boards with this game. Game Board A provides practice with facts to 20. Game Board B provides practice with facts to 10.

If you don't have a copy of a game board or can't print a copy right now, you can make your own. On a sheet of paper, draw a number line from 0 to 20 (or from 0 to 10), with ticks for each number in between. Make your own spinners or use digital spinners.



Number Line Race Game Board A
facts to 20



Number Line Race Game Board B
facts to 10

Skills

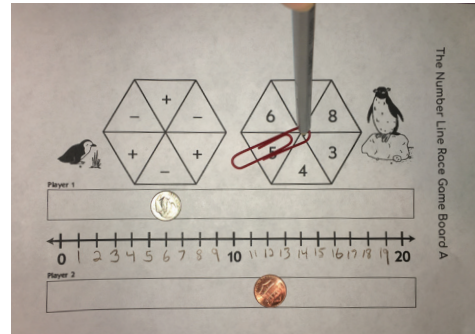
This game helps us practice

- Addition and subtraction facts within 20
- Counting on to add
- Counting back to subtract
- Using a number line to add or subtract

How to Play

Note: The instructions below apply to Game Board A.

1. Work together to label all the marks on the number line.
 - » Start by pointing to the marks for 5 and 15 and asking which numbers belong there.
 - » Then work together to label the other marks on the number line, so that all numbers from 0 to 20 are labeled.
2. When playing with Game Board A, the game markers for both players start at 10 on the number line.
 - » Place the game marker for Player 1 above the 10 and the game marker for Player 2 below the 10.
3. Players take turns spinning both spinners and moving their game marker according to the results.
4. If players spin a combination that will take them off the number line, they stay where they are and keep spinning until they can make a move. For example:
 - » If a player is at 16 and they spin $+6$, they stay and spin again.
 - » If a player is at 4 and they spin -6 , they stay and spin again.
5. The first player to land exactly on 0 or exactly on 20 wins!
6. Have fun!



Chin's game marker is at 12. He was hoping to spin $+8$, but he spins a $-$ sign and a 5. He jumps back 2 to 10, then 3 more to 7. Then he says, "Twelve minus 5 is equal to 7."

Tips for Families

Before the game:

- Choose the game board most appropriate for your child.
- Remember to work together to complete the missing numbers on the number line.
- Practice counting forward and backward on the number line.
- Place a game marker at 8 on the number line. Talk about how you would move the game marker if you spin $+3$. What if you spin $+6$? What if you spin -4 ?

During the game:

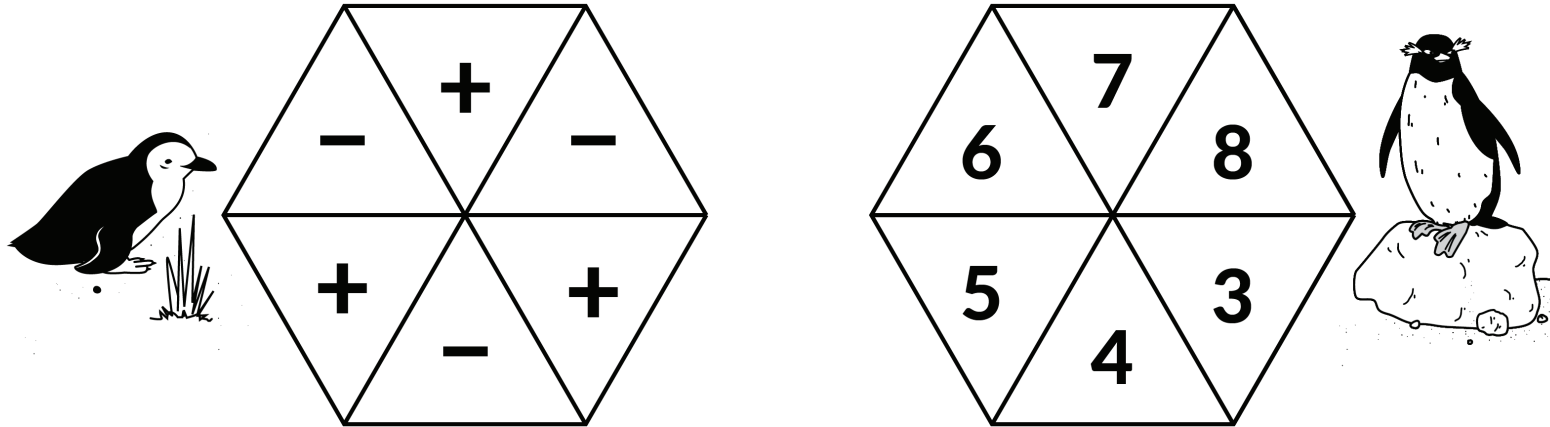
- Ask: *What number do you hope to spin? Why?*
- Encourage players to move their game markers more than one space at a time. For example, if a player is at 7 and spins +6, they can jump 3 spaces to 10 and then 3 more spaces to 13.
- Encourage players to say the equation that matches each of their moves.

Change It Up

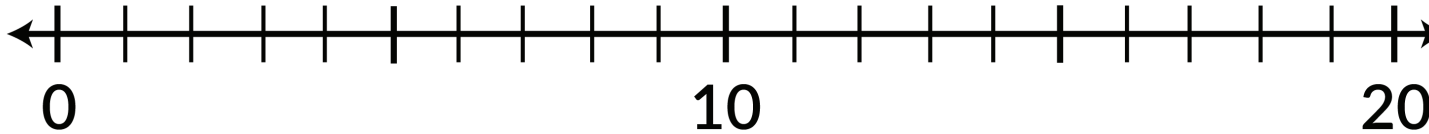
Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below. How did it change your strategy for winning the game?

- Use Game Board B (0–10 number line).
 - » Both players start at 5, and the first to land on 0 or 10 wins.
 - » We encourage you to try both game boards for this game. At the beginning of the school year, first graders are expected to be fluent with addition and subtraction facts within 10 and should build on that understanding as they work with addition and subtraction facts to 20.
- If a player lands on a number that is already occupied by another game marker, they bump the other player's game marker back to 10.
- Make another number spinner or use a dice with the numbers 1–6 instead of 3–8. Let players choose which number spinner to use for each turn.
- Tell a story problem to match each turn. Use the penguins on the game board for story problem inspiration!
- The regular rules allow the player to spin again if their original spin would move them off the number line. Try either of these alternate rules when a player makes a spin that would take them off the number line:
 - » The player loses their turn.
 - » To make the game more challenging, allow players to move before 0 and after 20. Add numbers to both ends of the number line on the game board as needed and explain that a number line extends infinitely far in both directions. This may involve the use of negative numbers, which often fascinate young learners. (Avoid saying that there are no numbers less than 0, because that's not true.)

Number Line Race Game Board A

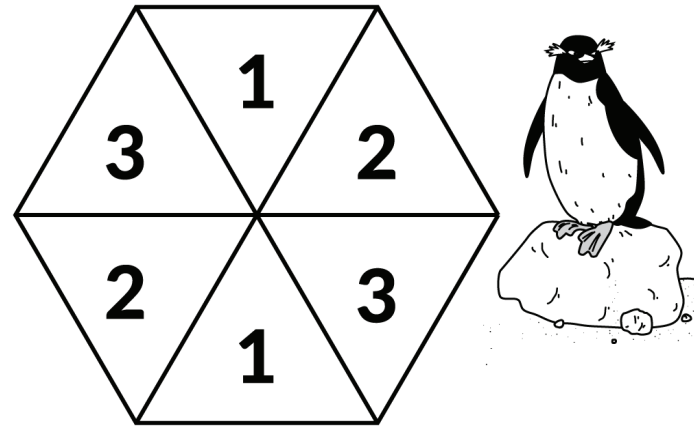
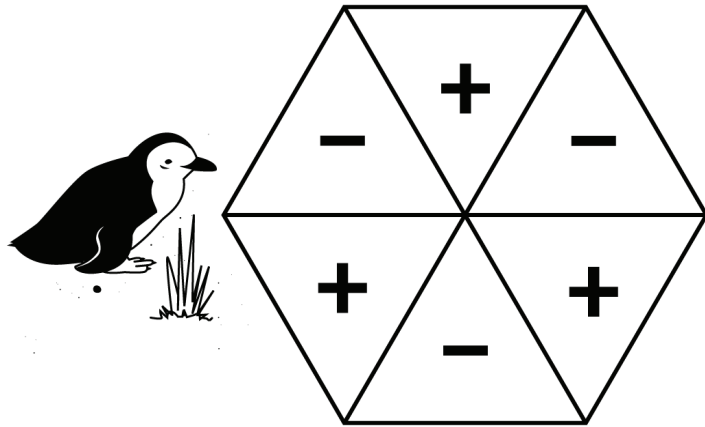


Player 1

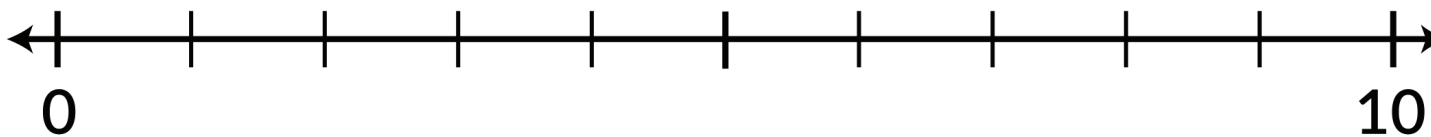


Player 2

Number Line Race Game Board B



Player 1



Player 2