



CCTCA 2026

K-3 Engaging Math Games with Engaging Dice

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CALENDAR TIC TAC TOE

LEVEL: Kindergarten – Grade 1

SKILLS: locating dates on a calendar, verbalizing day, month, date in proper sequence

PLAYERS: 2 - 3

EQUIPMENT: one thirty-sided die, calendar page, bingo chips (1 color per player)

GOAL: get three bingo chips of your own color in a row, either horizontally, vertically, or diagonally

GETTING STARTED:

Player One rolls the die and reads the number. Player One locates this number on the calendar and places one of their chips on this space. Players must verbalize their play (ie. Player One rolls 7 and verbalizes Thursday, June 7th).

JUNE

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|---------|-----------|----------|--------|----------|
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

NOTE:
If playing on a real calendar with the 31st showing, tell students this space is out of play.

Player Two now takes their turn. They roll the die, locate the appropriate space, verbalize the date properly and place their chip down. Players continue to alternate turns trying to get “TIC TAC TOE - THREE IN A ROW”. The first player to get three in a row of their own color wins the round. All chips are cleared from the board and a new round begins.

CAPTURING AN OPPONENT’S SPACE: If a player rolls a number that is occupied by their opponent then that player removes their chip and replaces it with their own. (ie. Player One rolls a 14, which is occupied by Player Two. Player Two must remove their chip and Player One now occupies that space).

MATH JOURNAL WORK AND EXTENSIONS:

1. If you wish, use the current months calendar instead of the one provided. Before you begin the game, ask the students inquiry questions such as the following:
 - Which days of the week do we stay home from school typically?
 - Find today’s date. What will the date be in 1 week? What is the day of the week in 2 days?
 - How many days in this month?

VARIATION:

1. If a player rolls their birthday number (ie. born on the fifth of the month = 5, they automatically win that round). For players born on dates not appearing on the die, let them pick their favourite number.

CALENDAR TIC TAC TOE GAMEBOARD

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--------|--------|---------|-----------|----------|--------|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | | | | | |

NUMBER FACE OFF

LEVEL: Kindergarten to Grade 1

SKILLS: subitizing, counting to 12, $>$ $<$ $=$

PLAYERS: 1 versus 1

EQUIPMENT: one 12-sided die per player, bingo chips or other counters, ruler

GOAL: to have the greatest number, and have the most points after a set period of time.

GETTING STARTED:

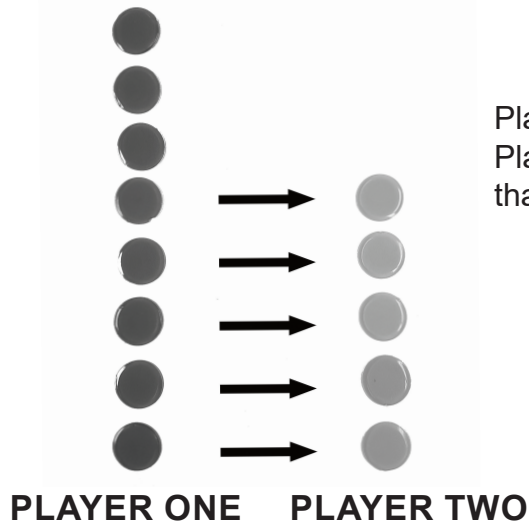
Players both sit facing the ruler and each need their own die. Both spotted and numeral dice can be used. Each player rolls, counts and/or identifies their number by subitizing and places it down on the ruler. Both players verbalize the number they rolled. The player with the greater number scores a point.



“Nine is greater than two.”

Player Two takes a bingo chip and places into their point pile.

Players roll again and compare their next numbers. In the event of a tie, both players can take a bingo chip. Play continues for a set period of time. Players count up their total number of bingo chips. The player with the most wins OR players can match, using one-to-one correspondence, their collected bingo chips to determine the winner.



Player One has three more than Player Two and is the winner for that game.

NUMBER FACE OFF RECORDING SHEET

| MY NUMBER | > = < | MY FRIEND'S NUMBER | MY NUMBER | > = < | MY FRIEND'S NUMBER |
|---|---|---|---|---|---|
| <div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto;"></div> | <div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div> | <div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto;"></div> | <div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto;"></div> | <div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div> | <div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto;"></div> |
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1. When my number is bigger than my partner's I draw the _____ symbol.
2. When my number is less than my partner's I draw the _____ symbol.
3. I won _____ rolls.
4. My partner won _____ rolls.

BETWEENERS RECORDING SHEET

| | |
|---|--|
| G | |
| B | |
| L | |

| | |
|---|--|
| G | |
| B | |
| L | |

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| G | |
| B | |
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| L | B | G |
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|---|---|---|
| L | B | G |
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|---|---|---|
| L | B | G |
| | | |

FREEZE FOR THIRTY

- LEVEL:** Grade 2 and up
- SKILLS:** number recognition, adding with regrouping, estimating, subtracting from 30, probability
- PLAYERS:** 2 or more (or 2 - 4)
- EQUIPMENT:** 1 thirty-sided die, paper and pencil
- GETTING STARTED:** Player one rolls the die and records their roll. The goal is to reach the sum of thirty with three rolls in total. The accumulated sum may not be greater than thirty or you 'strike out' for that round. A player may choose to 'freeze' after the first or second roll, record the number or sum and their turn is over for that round. Players continue to alternate turns and the player closest to thirty in each round earns one point. If a player scores thirty exactly, they earn two points for that round. The first player to earn ten points is the winner.

EXAMPLE:

Player 1

Roll 1: 16

Roll 2: 12

$16 + 12 = 28$

and player one chooses to "freeze" and does not take their third roll.

Player 2

Roll 1: 2

Roll 2: 18

Roll 3: 5

$2 + 18 + 5 = 25$

Player one is closer to 30 and earns one point for that round.

MYSTERY ROLL

| | LEAST | BETWEEN | GREATEST | RANGE | ANALYZE |
|----|-------|---------|----------|-------|---------|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |



You will need to play either 50 or 100 rounds. Play in groups of 3. Every round record L, B and G plus figure out the RANGE between G and L. Use a calculator if you wish. When you are playing you should use your highlight pen to mark any unusual rolls - for example, tie rolls, sequences, unusual winning rolls, etc. Circle the points you score.

MAKE 20

LEVEL: Grade 1-2

SKILLS: adding and subtracting within 20, counting on and back, odd/even

PLAYERS: 2 (1 vs 1)

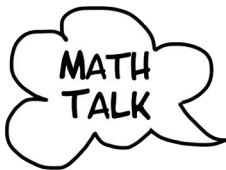
EQUIPMENT: cards (Ace=1) - 5, gameboard, recording sheet, bingo chips or markers

GOAL: to be the first player to reach either 0 or 20

GETTING STARTED: To begin, each player places their marker at “10” on their gameboard. Each player now turns over a card. This number will determine the number of spaces that the player can move.

| | |
|----------------------|---|
| ODD CARD | 1, 3, 5 PLAYERS MUST SUBTRACT AND MOVE THEIR MARKER BACK TOWARDS 0 THE NUMBER OF SPACES INDICATED ON THE CARD |
| EVEN CARD | 2, 4, 6 PLAYERS MUST ADD AND MOVE THEIR MARKER FORWARD TOWARDS 20 THE NUMBER OF SPACES INDICATED ON THE CARD |

Players do not need to land exactly on 20 or 0 to win, they can reach and pass the goal. For example, if Player One’s marker is at 18 and they turn over a 4, they can move their marker four spaces towards (and passing) 20, making them the winner.



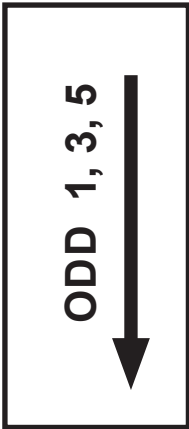
Make sure players verbalize each turn.
eg. $17-3$... “seventeen minus three equals fourteen”

JOURNAL WORK AND EXTENSIONS:

1. Have players record all their turns on the recording sheet.
2. Have students count how many times addition vs. subtraction happened. Was it about the same?

MAKE 20 GAMEBOARD

ODD 1, 3, 5



EVEN 2, 4, 6



PLAYER ONE

START

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20



PLAYER TWO

START

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

SUBTRACT-A-GRAPH GAMEBOARD

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|----|
| | | | | | | | | | | | 11 |
| | | | | | | | | | | | 10 |
| | | | | | | | | | | | 9 |
| | | | | | | | | | | | 8 |
| | | | | | | | | | | | 7 |
| | | | | | | | | | | | 6 |
| | | | | | | | | | | | 5 |
| | | | | | | | | | | | 4 |
| | | | | | | | | | | | 3 |
| | | | | | | | | | | | 2 |
| | | | | | | | | | | | 1 |
| | | | | | | | | | | | 0 |

STAR 97 GAMEBOARD

| | MY NUMBER | | CLOSEST TO BENCHMARK | EXPANDED ADDITION SENTENCE |
|--------------|--------------|---|-------------------------|-------------------------------|
| 0 - 9 | _____ | → | _____ | _____ |
| 10-19 | _____ | → | _____ | _____ |
| 20-29 | _____ | → | _____ | _____ |
| 30-39 | _____ | → | _____ | _____ |
| 40-49 | _____ | → | _____ | _____ |
| 50-59 | _____ | → | _____ | _____ |
| 60-69 | _____ | → | _____ | _____ |
| 70-79 | _____ | → | _____ | _____ |
| 80-89 | _____ | → | _____ | _____ |
| 90-99 | _____ | → | _____ | _____ |

DOUBLE DICE DILEMMA RECORDING SHEET

| ROUND ONE | | | | | ROLL | ACCUMULATED POINTS | | |
|---|-------|-----------|-------|---|-------------|--------------------|-------|-------|
| <table border="1"> <tr> <td>+</td> <td>-</td> <td>×</td> <td>÷</td> <td><i>FREE</i></td> </tr> </table> | + | - | × | ÷ | <i>FREE</i> | 1 | _____ | _____ |
| | + | - | × | ÷ | <i>FREE</i> | | | |
| | 2 | _____ | _____ | | | | | |
| | 3 | _____ | _____ | | | | | |
| | 4 | _____ | _____ | | | | | |
| 5 | _____ | _____ = ○ | | | | | | |

| ROUND TWO | | | | | ROLL | ACCUMULATED POINTS | | |
|---|-------|-----------|-------|---|-------------|--------------------|-------|-------|
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| | + | - | × | ÷ | <i>FREE</i> | | | |
| | 2 | _____ | _____ | | | | | |
| | 3 | _____ | _____ | | | | | |
| | 4 | _____ | _____ | | | | | |
| 5 | _____ | _____ = ○ | | | | | | |

| ROUND THREE | | | | | ROLL | ACCUMULATED POINTS | | |
|---|-------|-----------|-------|---|-------------|--------------------|-------|-------|
| <table border="1"> <tr> <td>+</td> <td>-</td> <td>×</td> <td>÷</td> <td><i>FREE</i></td> </tr> </table> | + | - | × | ÷ | <i>FREE</i> | 1 | _____ | _____ |
| | + | - | × | ÷ | <i>FREE</i> | | | |
| | 2 | _____ | _____ | | | | | |
| | 3 | _____ | _____ | | | | | |
| | 4 | _____ | _____ | | | | | |
| 5 | _____ | _____ = ○ | | | | | | |

| ROUND FOUR | | | | | ROLL | ACCUMULATED POINTS | | |
|---|-------|-----------|-------|---|-------------|--------------------|-------|-------|
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| | + | - | × | ÷ | <i>FREE</i> | | | |
| | 2 | _____ | _____ | | | | | |
| | 3 | _____ | _____ | | | | | |
| | 4 | _____ | _____ | | | | | |
| 5 | _____ | _____ = ○ | | | | | | |

WHOLE CLASS STAND UP RECORDING SHEET HUNDREDS

| | HUNDREDS | TENS | ONES | CALL > OR < | POINTS |
|--------------|----------|------|------|-------------|--------|
| TEACHER ROLL | | | | | |
| MY ROLL | | | | | |
| TEACHER ROLL | | | | | |
| MY ROLL | | | | | |
| TEACHER ROLL | | | | | |
| MY ROLL | | | | | |
| TEACHER ROLL | | | | | |
| MY ROLL | | | | | |
| TEACHER ROLL | | | | | |
| MY ROLL | | | | | |
| TEACHER ROLL | | | | | |
| MY ROLL | | | | | |

WHOLE CLASS STAND UP RECORDING SHEET

HUNDRED THOUSANDS

| | HUNDRED THOUSANDS | TEN THOUSANDS | THOUSANDS | HUNDREDS | TENS | ONES | CALL > OR < | POINTS |
|--------------|-------------------|---------------|-----------|----------|------|------|-------------|--------|
| TEACHER ROLL | | | | | | | | |
| MY ROLL | | | | | | | | |

| | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|
| TEACHER ROLL | | | | | | | | |
| MY ROLL | | | | | | | | |

| | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|
| TEACHER ROLL | | | | | | | | |
| MY ROLL | | | | | | | | |

| | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|
| TEACHER ROLL | | | | | | | | |
| MY ROLL | | | | | | | | |

| | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|
| TEACHER ROLL | | | | | | | | |
| MY ROLL | | | | | | | | |

| | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|
| TEACHER ROLL | | | | | | | | |
| MY ROLL | | | | | | | | |



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Zip/Postal: _____ Email: (PRINT CLEARLY) _____

Phone: _____ Fax: _____

Ship To: () SAME AS ABOVE Contact Name: _____

Address: _____ City: _____ St/Pv: _____

Zip/Postal: _____ Email: (PRINT CLEARLY) _____

Phone: _____ Fax: _____

| Item Description (including code if known) | Qty | Price | Subtotal |
|--|-----|-------|----------|
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