Pick A Card/Roll the Dice — One Digit

What You Need:

- » Set of cards with the numerals 0 to 9 written in green, one on each card (or green 10-sided die)
- » Integer Block Kit (units)
- » Decimal Street® poster

- 1. Pick a card (or roll the die).
- 2. Place that number of unit blocks in the appropriate house on the Decimal Street poster.
- 3. Replace the card and shuffle.
- 4. If multiple players are playing, give the next player a turn.

Pick A Card/Roll the Dice — Two Digits

What You Need:

- » Set of cards with the numerals 0 to 9 written in green, one on each card (or green 10-sided die)
- » Set of cards with the numerals 0 to 9 written in blue, one on each card (or blue 10-sided die)
- » Integer Block Kit (tens and units)
- » Decimal Street® poster

- 1. Pick a card from each set (or roll both dice).
- 2. The blue digit represents tens and the green digit represents units.
- 3. Place the correct number of 10-blocks and unit blocks in the appropriate houses on the Decimal Street poster.
- 4. Replace the cards and shuffle.
- 5. If multiple players are playing, give the next player a turn.

Pick A Card/Roll the Dice — Three Digits

What You Need:

- » Set of cards with the numerals 0 to 9 written in green, one on each card (or green 10-sided die)
- » Set of cards with the numerals 0 to 9 written in blue, one on each card (or blue 10-sided die)
- » Set of cards with the numerals 0 to 9 written in red, one on each card (or red 10-sided die)
- » Integer Block Kit (hundreds, tens, and units)
- » Decimal Street® poster

- 1. Pick a card from each set (or roll all three dice).
- 2. The red digit represents hundreds, the blue digit represents tens, and the green digit represents units.
- 3. Place the correct number of 100-blocks, 10-blocks, and unit blocks in the appropriate houses on the Decimal Street poster.
- 4. Replace the cards and shuffle.
- 5. If multiple players are playing, give the next player a turn.

Blocks and Symbols Matching

What You Need:

- » Set of cards with the numerals 1 to 9 on one side (one on each card) and a traced picture of the matching block on the other side
- » Integer Block Kit

- 1. Shuffle the cards and place them on the table with the numerals showing.
- 2. Pick a card.
- 3. Find the block that matches the number.
- 4. Look at the back of the card to check whether the block selected matches the picture.
- 5. If the correct match is made, keep the card. Otherwise, return the card to the bottom of the pile.
- 6. If multiple players are playing, give the next player a turn. Keep playing until all the cards are gone.

Simon Says

What You Need:

- » Set of cards with various "Simon Says" directions (e.g., "Put a three on your shoulder.")
- » Integer Block Kit

- 1. Choose someone to be "Simon."
- 2. Simon reads a card to the other players.
- 3. If players follow Simon's directions correctly, they receive a point.
- 4. Continue until all the cards have been read.
- 5. Players may take turns being Simon after each card.

What's Missing?

What You Need:

» Integer Block Kit

- 1. Line up the blocks in order, unit through nine.
- 2. The first player covers their eyes while the other player removes one of the blocks.
- 3. The first player tries to identify which block is missing.
- 4. Players take turns.

The Grab Bag

What You Need:

- » Set of cards with the numerals 1 to 9 written on them, one per card
- » Paper lunch bag
- » Integer Block Kit

- 1. Place the unit to nine blocks in a paper lunch bag.
- 2. The first player picks a card and feels around in the bag and tries to find the block that matches the card.
- 3. If a correct match is made, keep the card. Otherwise, return the card to the bottom of the pile.
- 4. Players take turns. Keep playing until all the cards are gone.

Block Memory

What You Need:

- » Set of cards with the numerals 1 to 9 on one side, one per card
- » Set of cards with pictures of the unit to nine blocks, one per card

- 1. Mix up the cards. Put them on the table face down.
- 2. Turn over two cards. Do they match?
- 3. If the cards match, keep them. If they do not match, turn them back over.
- 4. If multiple players are playing, give the next player a turn. Keep playing until all the cards are gone.

Both Sides the Same

What You Need:

- » Set of cards with the numerals 1 to 10 written on them, one per card
- » Integer Block Kit
- » Paper and pencil (or small dry erase board and marker)

- 1. Draw a line down the middle of the paper.
- 2. Pick two cards. Find the blocks that match the numbers.
- 3. Place a block on each side of the line.
- 4. Ask "What plus ____ is the same as ____?"

 Without putting blocks together, find a block that can be added to the shorter one to equal the longer one.
- 5. Put the blocks together to check.
- 6. Replace the cards and shuffle.
- 7. If multiple players are playing, give the next player a turn.

Who Are You?

What You Need:

- » Integer Block Kit
- » Paper and pencil (or small dry erase board and marker)

- 1. Choose a set of math facts to practice.
- 2. The first player begins with the block that represents the sum (e.g., the 8-block) and places a smaller block above the sum block (e.g., the 3-block).
- 3. Next, the player says "Together we make ___ (sum). I am ___ (value of smaller block); who are you?" (e.g,. "Together we make eight. I am three; who are you?")
- 4. The other player chooses the block they think will represent the missing addend and writes the equation (e.g., 5 + 3 = 8).
- 5. Players take turns.

Fishin' For Tens

What You Need:

» Deck of playing cards, with tens, jokers, and face cards removed (aces are ones)

- 1. Shuffle cards and deal five cards to each player. Set the remaining cards face down on the table as a draw pile.
- 2. Choose one of your cards. Think of the number you need to add to it to make 10. (For example, if you have a 3, you need a 7 to make 10.)
- 3. Ask another player for the card you need. If they have it, take it and put both cards down in front of you. If they do not have it, they say, "Go fishin'!" Then you have to take another card from the draw pile.
- 4. Players take turns until someone is out of cards.
- 5. The person who runs out of cards gets two points, and everyone gets one point for each ten laid down.

Build a Wall

What You Need:

- » Integer Block Kit
- » Paper and pencil (or small dry erase board and marker)

How to Play:

- 1. Place a 10-block at the bottom of the paper.
- 2. Find two blocks that together are the same number of units long as the 10-block. Place them on top of the 10-block.
- 3. Write an equation to show this addition fact next to the blocks.
- 4. Now find two different blocks that are the same number of units and make a new row. Write the equation next to the blocks.
- 5. Keep adding rows to the "wall" until nine different rows have been created.

Variation:

Start with a 9-block at the bottom of your paper.

Fill In the Space

What You Need:

- » Integer Block Kit
- » Paper and pencil (or small dry erase board and marker)

How to Play:

- 1. Place a 10-block at the bottom of the paper. Place a second smaller block on top of the 10-block.
- 2. The other player picks the correct block to fill the space and make ten and writes an equation to show this addition fact next to the blocks.
- 3. Players take turns until nine different equations have been created.

Variation:

Start with a 9-block at the bottom of the paper.

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What You Need:

» Integer Block Kit

How to Play:

- 1. Place the unit through nine blocks in order right to left with the unit block on the right.
- 2. One player chooses a number between one and nine and asks the other, "What number is one less than ___ (the chosen number)?"
- 3. The other player answers.
- 4. Players take turns.

Variation:

Ask "What number is two less than ___?"

Race to 100

What You Need:

- » Set of cards with the numerals 0–9 written in green, one on each card (or green 10-sided die)
- » 1 red 100-block for each player
- » Integer Block Kit

- 1. Each player places a 100-block on the table in front of them.
- 2. Pick a card (or roll the die) and find the block that matches the number on the card or die (e.g., 6 = purple).
- 3. Place the block on the first row of the 100-block.
- 4. Replace card and shuffle.
- 5. If multiple players are playing, give the next player a turn.
- 6. If the card drawn is more than needed to complete the row, the block may be exchanged for two smaller blocks (e.g., exchange a 6-block for a 2-block and a 4-block).
- 7. Continue until a player fills their 100-block.

Race to 500

What You Need:

- » Set of cards with the numerals 0 to 9 written in green, one on each card (or green 10-sided die)
- » Set of cards with the numerals 0 to 9 written in blue, one on each card (or blue 10-sided die)
- » Paper and pencil or small dry erase board and marker (1 set per player)

- 1. Pick a card from both sets (or roll both dice).
- 2. Place the blue digit in the tens place and the green digit in the units place. Write this number on the paper.
- 3. Replace cards and shuffle.
- 4. If multiple players are playing, give the next player a turn.
- 5. On the next turn, make another number and add it to the previous one.
- 6. Continue until a player reaches 500 or greater.

Race to 5,000

What You Need:

- » Set of cards with the numerals 0 to 9 written in green, one on each card (or green 10-sided die)
- » Set of cards with the numerals 0 to 9 written in blue, one on each card (or blue 10-sided die)
- » Set of cards with the numerals 0 to 9 written in red, one on each card (or red 10-sided die)
- » Paper and pencil or small dry erase board and marker (1 set per player)

- 1. Pick a card from each of the three sets (or roll all three dice).
- 2. Place the red digit in the hundreds place, the blue digit in the tens place, and the green digit in the units place. Write this number on the paper.
- 3. Replace cards and shuffle.
- 4. If multiple players are playing, give the next player a turn.
- 5. On the next turn, make another number and add it to the previous one.
- 6. Continue until a player reaches 5,000 or greater.

T-Chart

What You Need:

- » Set of cards with numerals 0 to 9 written on them, one on each card (or 10-sided die)
- » Paper and pencil (or small dry erase board and marker)

How to Play:

1. Choose a set of math facts to practice, such as adding eight.

- Mark Sue
- 2. Draw a T-chart on the paper. Write the names of each player on either side.
- 3. Place the cards in a pile, numeral side down.
- 4. Pick a card (or roll the die).
- 5. Use the number on the card and the chosen math fact to say and write an equation on the T-chart.
- 6. Take turns until you have drawn all the cards or both players have had five turns.

Variation:

If you are ready to practice all the facts, draw two cards each turn (or roll two dice) and add or multiply them.

Math Fact War

What You Need:

» Deck of playing cards with the tens, jokers, and face cards removed (Aces are ones. Leave tens in deck for multiplication.)

How to Play:

- 1. Shuffle the cards. Place the pile face down on the table.
- 2. Choose a set of math facts to practice, such as adding eight.
- 3. Turn over the top card. Add (or multiply) the math fact and the number on the card. If your answer is correct, keep the card. Otherwise, turn the card over and return it to the bottom of the pile.
- 4. Players take turns until all the cards are gone.

Variation:

If you are ready to practice all the facts, draw two cards each time and add (or multiply) them.

Ball Toss

What You Need:

» Inflatable beach ball with the numerals 0 to 9 written randomly on different sections with permanent marker (each numeral should be written at least twice)

How to Play:

- 1. Choose a set of math facts to practice, such as adding eight.
- 2. Catch the ball from another player. Find the number that is closest to the thumb on your right hand.
- 3. Add (or multiply) the math fact and that number.
- 4. Toss the ball to the next player.
- 5. Players earn a point for each correct response.

Variation:

If you are ready to practice all the facts, find the number that is closest to the thumb on your right hand and the number that is closest to the thumb on your left hand. Add (or multiply) them.

Basket of Problems

What You Need:

- » Small paper bag, box, or basket
- » Problems on slips of paper
- » Corresponding Math-U-See® Manipulatives

- 1. Place cut-apart problems in the container.
- 2. Pull out a problem, build it with the manipulatives, and give the answer.
- 3. Another player checks the work.
- 4. Take turns until all the problems have been completed or everyone has had five turns.
- 5. Players earn a point for each correct answer.

Hundreds Chart

What You Need:

- » Laminated hundreds chart with first row showing numerals 0 to 9, second row 10 to 19, etc.
- » Dry erase marker
- » Marker eraser

- 1. Select a skip counting fact. Circle all the multiples for the selected fact.
- 2. Describe any pattern you discover.

Build A Fraction

What You Need:

- » Set of cards with the digits 0 to 5, one on each card, and "numerator" written on the back of each card
- » Set of cards with the digits 1 to 6, one on each card, and "denominator" written on the back of each card
- » Pencil, chenille stem, or piece of yarn to represent vinculum
- » Fraction Overlay Kit (1 per player)

- 1. Shuffle each set of cards and place them face down in two piles.
- 2. Take a card from each pile and place the numerator card above the vinculum and the denominator card below to create a fraction.
- 3. Next, use the overlays to build the fraction. If the fraction is improper, build it as a mixed number.
- 4. Replace the cards and shuffle.
- 5. If multiple players are playing, give the next player a turn.

Name That Fraction

What You Need:

- » Fraction Overlay Kit
- » Paper and pencil or small dry erase board and marker (1 set per player)
- » Folder for a "screen"

How to Play:

- 1. The first player sets the folder up as a screen and uses the Fraction Overlay Kit to build a fraction behind it. (It can be a fraction that is not in simplest form.)
- 2. The player says, "Go!" and removes the folder. The other players must write the fraction the model represents. Each player earns one point for correctly identifying the fraction.
- 3. Players take turns building fractions.

Variation:

The other players must write an equivalent fraction to the one shown.

Equivalent Fraction Race

What You Need:

- » Set of cards with the following fractions written: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$
- » Fraction Overlay Kit (1 per player)
- » Paper and pencil or small dry erase board and marker (1 set per player)
- » Timer

- 1. Shuffle the fraction cards and scatter them face down on the table.
- 2. Set the timer for two minutes. At the start of the timer, each player takes a fraction card and turns it over. They then write the fraction on their paper and build it with the overlays.
- 3. Next, each player uses clear overlays to build and write as many equivalent fractions as possible before the timer goes off.

Race To 10.0

What You Need:

- » Set of cards with the digits 0 to 9 written in green, one on each card (or green 10-sided die)
- » Set of cards with the digits 0 to 9 written in blue, one on each card (or blue 10-sided die)
- » Set of cards with the digits 0 to 9 written in red, one on each card (or red 10-sided die)
- » Token or button to represent decimal point
- » Paper and pencil or small dry erase board and marker (1 set per player)

- 1. Shuffle each set of cards and place them face down in three piles. Place a token or button to represent the decimal point on the table.
- 2. The first player takes a card from each pile (or rolls all three dice). They place the red digit in the hundredths place, the blue digit in the tenths place, and the green digit in the units place. They write the corresponding number on the paper.
- 3. Replace the cards and shuffle.
- 4. If multiple players are playing, give the next player a turn.
- 5. On subsequent turns, each player adds the new number to their previous one.
- 6. Continue until a player reaches ten or greater.

Decimal Basketball

What You Need:

- » 1 small ball of paper or ping-pong ball
- » Small basket, empty can, or other container for the "basket"
- » Paper and pencil or small dry erase board and marker (1 set per player)

How to Play:

- Place the basket across the desk or table.
 The first player tosses the ball ten times, trying to get it into the basket.
- 2. The player records the number of times they made the shot, and then writes this number as a decimal. The player earns one point if correct.
- 3. Players take turns.

Variations:

Players must write the score as an equivalent decimal in hundredths or thousandths. Players must write the score as a percentage. Players must record the number of shots made out of twenty or twenty-five attempts and convert the score to a decimal and/or percentage.

Decimal War

What You Need:

- » Deck of cards with tens, face cards, and jokers removed (aces are ones)
- » Card, piece of paper, or small dry erase board with a large greater than symbol
- » Paper and pencil or small dry erase board and marker (1 set per player)

- 1. Shuffle the cards and place the pile face down on the table.
- 2. The first player turns over the top two cards. If they have the same value, set them aside. If the cards are different values, place one on either side of the *greater than* symbol.
- 3. The player must then use the numbers on the cards to write a correct inequality, incorporating zeros to create decimal values. For example, if the cards appear as 3 > 7, they can add zeros and write 0.3 > 0.007 to get a correct inequality.
- 4. Players take turns until all the cards are used.

Integer War

What You Need:

» Deck of playing cards with jokers and face cards removed (aces are ones)

- 1. Shuffle the cards and place the pile face down on the table.
- 2. The first player turns over the top two cards. If a card is black, its value is positive; if it is red, its value is negative. (For example, the 8 of hearts represents –8.) The player adds (or multiplies) the numbers on the cards.
- 3. If the player answers correctly, they keep the cards. Otherwise, return the cards to the bottom of the pile.
- 4. Players take turns until all the cards are gone.

Power War

What You Need:

- » Set of cards with the digits 0 to 9 written in blue, one on each card (or blue 10-sided die)
- » Set of cards with the digits 0 to 9 written in red, one on each card (or red 10-sided die)
- » Paper and pencils (or small dry erase board and markers)
- » Scientific calculators (optional)

How to Play:

1. Players draw a T-chart on the paper with their name as headings.

Mark Sue

- 2. Shuffle the cards and place each pile face down on the table.
- 3. Each player chooses one card from each pile or rolls both dice. On their side of the chart, they write an exponential expression, using the blue digit as the base and the red digit as the exponent (e.g., 5²).
- 4. Each player calculates the value and writes it next to the expression. The player who has the greater value earns a point.
- 5. Return the cards to the piles and shuffle.
- 6. Play ten rounds.

Make It Simple — Single Player

What You Need:

- » X-blocks, -X-blocks, green unit cubes
- » Box or paper bag
- » Paper and pencil (or small dry erase board and marker)

- 1. Place all the blocks into the box or bag.
- 2. Without looking, pull out a handful of blocks and place them on the table. Write an expression representing the blocks (e.g., unit blocks = positive units, upside-down unit blocks = negative units).
- 3. Match and remove all additive inverse pairs (e.g., X-block and -X-block).
- 4. Write another expression for the blocks that remain.

Make It Simple — Partner Challenge

What You Need:

- » X-blocks, -X-blocks, green unit cubes
- » Paper and pencil (or small dry erase board and marker)

- 1. The first player writes an expression on the paper or dry erase board (e.g., x + 2x + 5 x 3).
- 2. The second player builds the expression with the blocks. A correct expression earns a point.
- 3. Next, the second player matches and removes all additive inverse pairs (e.g., X-block and -X-block). The second player writes another expression for the blocks that remain.

 A correct expression earns another point.
- 4. Players switch roles and continue playing until one of them reaches ten points.