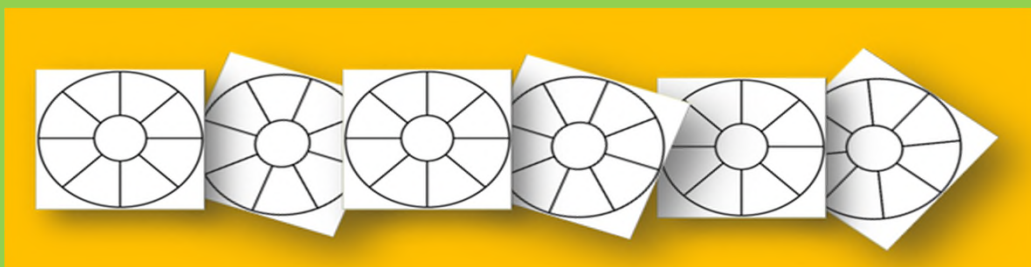


Playing Games with Concept Circles



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MAKING TEN



Variations: Integers, exponents, order of operations, players record their mathematical solutions.

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Materials:

Deck of playing cards (remove face cards or keep for value of 10)

Goal:

Collect the most cards

Setup:

Place 1 card in the center

Place 1 card in each outer section

Deal 6 cards to each player

Decide how many turns the game will last

Rules:

On your turn, place one card on another card to make 10. Do this as many times as you can.

If you cannot make 10:

Draw a card from the center pile and try again

Keep drawing and playing as long as you can make 10

If you still cannot make 10 after drawing, your turn ends

Winner:

The player with the most cards at the end wins.

Area in the Circle



Variations: More complex designs, limit the pattern blocks used, create a design that is larger by a specific number of units.

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Materials: Die, recording sheet (CC), pattern blocks

Setup:

Create a target design with pattern blocks in the center. Provide assorted pattern blocks to players.

Rules:

Roll a die each turn.

Take a pattern block with the same number of sides as the roll.

Special die rolls:

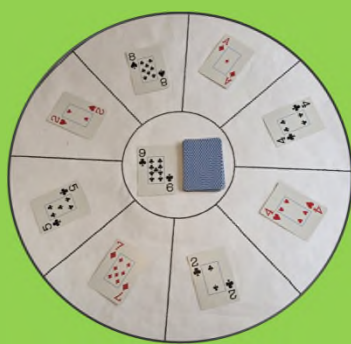
Roll a 1: Choose any shape

Roll a 2: Skip your turn

Roll a 6: Take no block; next player skips a turn

Goal: First player to build a design with the same area as the target wins.

Operations Number Joy



Variations: Integers, two-digit numbers, exponents, order of operations, players record their mathematical solutions.

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Materials: Playing cards (remove face cards) concept circle

Goal: Collect the most cards.

Setup:

- Place 1–2 cards (target number) in the center.
- Place 1 card in each outer section.
- Put remaining cards face down in a draw pile.
- Decide number of rounds (option: roll a die).

Rules:

- On your turn, use 2–3 cards in the outer sections to equal the center number using addition and/or subtraction (include multiplication/division for older students).
- If successful: keep those cards and replace them from the deck.
- If not: replace one outer card from the deck and pass to the next player.

Winner: Player with the most cards at the end

Fractions Fabulous!



Variations: Change middle design to 3 hexagons/1 hexagon. The player with the least number of shapes wins.

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Materials: Pattern blocks, double concept circle (cc)

Setup:

A design in the middle (hexagons) and a pattern block in each outer section.

Determine the fractional value for first round. ($1/2$, $1/3$, $1/4$ etc.)

Determine number of rounds for game.

Rules:

On each turn, choose shapes (any amount) to make chosen fraction of the middle design.

If you cannot create the fraction, pass to the next player.

Players must say "This is [fraction] of the [shape in the middle]" or they lose their turn.

When each player has had a turn, shapes, on the CC are replaced and a new fractional value is introduced for the next round.

Goal: The person with the most shapes wins.

Group Count!



Variations: Count by two's, count only factors of 24 etc, prime numbers. Use single concept circle and less numbers.

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Materials: Number Cards, double concept circle (cc)

Setup:

Place number cards randomly in each section of the concept circle, placing two cards in the sections furthest from the center.

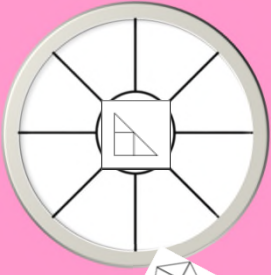
Rules:

As a team, begin counting from 1 to 24. You can only count the numbers in your section. How fast can you go?

If you wish, you can turn over the card, once you count it.

Goal: try to do this in the least amount of time.

Shape Connection



Materials: Deck of shape cards (from my website)

Goal: Earn the most points (1 point per valid criterion).

Setup:

Deal 4 cards to each player. Place one card in the center. Remaining cards form a draw pile.

Rules:

On your turn, choose a card that connects to the center card and state your criterion.

Place it in your section.

Criteria cannot be repeated (track them).

Next player does the same and explains their reasoning.

Bonus: +1 point for giving a new criterion for the previous card.

If you cannot play, draw a card and pass.

End: Game ends when a player has no cards left. Player with the most points wins

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