

Number Games: developing number fluency

Fraction Calculation

- Equipment: dice
- Decide on operation
- Roll to populate fractions
- Quickest to calculate wins points

Negative Numbers

- Equipment: dice, coin
- Start point as -2
- Spin coin for operation: +/-
- Roll dice for number
- Quickest to calculation wins point
- Eg/ roll 3, spin tails: $-2 - 3 = -5$

Ping Pong

- Equipment: none
- Play in pairs (+ 1x umpire, who can use calculator)
- xT / doubling & halving / + or - fractions / decimal jumps
- Teach can target specific groups/chn

Pendulum

- Equipment: Yσ-Yσ / Tennis ball on string / other
- Play in pairs (+ 1x umpire, who swings 'Pendulum')
- xT practice
- Make it faster by shortening string
- Make it trickier by assigning different xT

Quick Draw

- Equipment: die
- Play in pairs
- Total / Difference / Product
- Best of...

Split the difference

- Equipment: die
- Play in pairs
- Use dice to make 2 digit numbers
- Find the half-way point between the two numbers

Addition/Multiplication Pyramid

- Equipment: pyramid of 3-2-1 boxes ascending (prefilled or blank template)
- Play in pairs
- Points for good teamwork
- Algebraic link...

High Jump

- Equipment: MWBs + die
- Draw 3 boxes (like 3 attempts at high jump...)

- Set the bar => roll dice: must exceed target!
- Addition or Multiplication

Shut the Box

- Equipment: dice
- Each write numbers 1-12
- Roll dice => cross off numbers
- Eg/ roll 3 and 4: cross off 3 & 4 / or 7 (3+4) / or 12 (3x4)
- Winner is the first to cross off all numbers

Dot the Box

- Equipment: MWBs & die
- Play in pairs
- Decide on how much each box requires (start with 6)
- Roll dice, place dots (cannot split number between boxes!)
- Place tick in box when it is full
- Winner is the first to have a line (like noughts & crosses)
- Make it harder by changing rules: different total for each box, or each line...

Strike it out

- Equipment: Nrich poster (number line to 20)
- Play in pairs
- Cross two numbers out => Circle Sum or Difference
- Next player crosses circled number + another of choice => Circle Sum or Difference
- Winner is the person who prevents the other from moving

Nim

- Equipment: small sticks (or similar)
- Play in pairs
- Pick up 1 or 2 each turn
- Aim: to leave your partner with the last to pick up!

Fifteen

- Equipment: number line to 10
- Play in pairs
- Circle / Underline your numbers to make 15
- Winner is the last person to successfully select

Square It (see Nrich for interactive version)

- Equipment: dotty paper
- Play in pairs
- Take turns in placing a coloured dot
- Winner is the first to make a square