## What is this game about?

The dot pattern version of this game sees the numbers up to 10 spilt into component parts. The game focuses on concrete subtraction and on connecting addition to subtraction. Learning is reinforced by expressing the same number relationships concretely (counters arranged into dot patterns), diagrammatically (triads) and abstractly (as spoken number sentences).

## Equipment needed

- Counters or glass nuggets
- a game board (below) for each player and a pencil
- a 1-10 die (or spinner).


## Rules

Treat zero on the die as 10, and roll again if it lands on 1.
Take turns to roll the die and make a dot pattern out of that number of counters. Using two small bases (for example two post-it notes), move 1 or 2 of the counters onto one base. Arrange the remaining counters into the appropriate dot pattern on the other base. Read the
 components aloud, once as an addition equation and once as a subtraction, e.g. " $4+2=6$ " and " $6-2$ $=4$ ". Record both the components, as digits, in one of the relevant boxes on your game board.

The next time you roll the same number, you must choose the other alternative for splitting it into two component parts (remembering that one of the two components must be a 1 or a 2 ), because no two triads on your board may show the same pair of components. If you roll the same number yet again you will have to miss that turn.

The winner is the first player to complete one whole row and one whole column on their board.


## What is this game about?

The Cuisenaire version of this game provides practice in expressing component facts as equations. It focuses on addition - including concrete missing number additions - and is designed to reinforce the connection between addition and subtraction. Players benefit from having to express the same facts concretely (rods), diagrammatically (triads) and abstractly (as equations, when the rods are 'read' as number sentences).

## Equipment needed

- Cuisenaire rods
- a game board (below) for each player and a pencil
- a 1-10 die (or spinner).


## Rules

Treat zero on the die as 10 , and roll again if it lands on 1.
Take turns to roll the die and take a single Cuisenaire rod to match. Next to this rod, line up two smaller rods to show how to build the number out of two components. In this game, one of the components MUST be a 1 or a 2. Read the rods aloud, once as an addition equation and once as a subtraction, e.g. " $4+2=6$ " and " 6 $-2=4^{\prime \prime}$. Record the components as digits in one of the relevant boxes on your game board.

The next time you roll the same number, you must choose the other alternative for building it out of two components (remembering that one of the two components must be a 1 or a 2 ), because no two triads on your board may show the same pair of components. If you roll the same number yet again you will have to miss that turn.

## +1 or +2 Component Facts Game

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## +1 or + 2 Component Facts Game

| $\stackrel{2}{2}$ | $\wedge^{3}$ | $\stackrel{\pi}{4}$ |  |
| :---: | :---: | :---: | :---: |
| $\wedge^{5}$ | $\wedge^{5}$ | $\bigwedge^{6}$ | $\stackrel{(6}{6}$ |
| $\lambda^{8}$ | $\wedge^{7}$ | $\wedge^{8}$ | $\stackrel{8}{8}$ |
| $\wedge^{9}$ | ${ }^{9}$ | $\stackrel{10}{10}$ | $\stackrel{90}{\wedge}$ |

