

contents and sample pages

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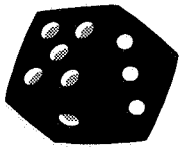
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Roll & Match

Materials

One six-faced dice.

A playing board and coloured counters.

Organisation

Two players.

Rules

- Players take turns to roll the dice and match the dots shown on the dice to numbers or words shown on the board.
- The first player to cover three squares in a row (vertically, horizontally or possibly diagonally) is the winner.

Teacher notes

This game involves number recognition and matching. The use of dot dice encourages the development of subitising — or the ability to glance at a small set of dots and instantly recognise the total.

Variations

- Use numbered dice and redesign the board accordingly.
- The board may be redesigned to accommodate different dice and combinations. For example if a ten-faced 0 - 9 dice is used players would only need to match to words and dots.
- Redesign the board to play a version of the game where players have to add or subtract one to the number shown on the dice.



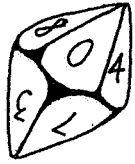
Standard Game Board

| | | | | | |
|------|------|-------|-------|------|-----|
| six | ** | 4 | two | * | ** |
| 5 | four | ** | 1 | six | ** |
| 2 | ** | three | ** | ** | 3 |
| one | ** | 6 | 4 | five | * |
| ** | 2 | one | ** | 3 | two |
| four | ** | 5 | three | 1 | 6 |

One Less Game Board

| | | | | | |
|------|------|-------|-------|------|-----|
| zero | ** | 4 | two | * | ** |
| 5 | four | ** | 1 | zero | ** |
| 2 | | three | | ** | 3 |
| one | ** | 0 | 4 | five | * |
| ** | 2 | one | ** | 3 | two |
| four | ** | 5 | three | 1 | 0 |





$+$ $-$ \times \div

High Five

Materials

Ten-faced dice.

Organisation

Whole class activity or two players.

Playing board, either copied from the blackboard or photocopied.

Rules

- Players roll one ten-faced dice three times or three ten-faced dice once and record the digits. The player then combines the three digits and various operations to produce the largest single-digit number he/she can. For example if the numbers 1, 3 and 5 are rolled 7 may be formed by the following combination: $5 + 3 - 1$. A better combination would be to add all three numbers to make 9 ($5 + 3 + 1$).
- After each roll the player must place the number that is formed into one of the five boxes contained on the score sheet.
- The game continues for five rounds after which the winner is the person who has formed the largest five-digit number (hence the name of the game).

Teacher notes

This game encourages students to look for different ways of combining numbers. When mixing operations such as multiplication and addition students should be made aware of the rule of order. There is also a focus on reading and writing numbers.

Variations

- Change the number of rounds so that numbers of varying sizes may be formed. For example, play High Seven.
- Determine the winner by asking small groups of students to line up in ascending order. Allow them only to state their number (reading large numbers) or only to show their number to other members of the group.

Sample game

| | | | | | |
|---------|---|---|---|-----------------------|---|
| ROUND 1 | 1 | 5 | 3 | $5 + 3 + 1$ | 9 |
| ROUND 2 | 3 | 1 | 2 | $3 \times 2 + 1$ | 7 |
| ROUND 3 | 9 | 5 | 5 | $9 \times 5 \div 5$ | 9 |
| ROUND 4 | 2 | 2 | 2 | $2 \times 2 \times 2$ | 8 |
| ROUND 5 | 1 | 1 | 2 | $2 + 1 + 1$ | 4 |

Numbers must be placed in the score box after each round, rather than at the end of the 5 games.

SCORE BOX

| | | | | |
|---|---|---|---|---|
| 9 | 9 | 7 | 4 | 8 |
|---|---|---|---|---|

