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The *One to fifty* game.

Invented by Chris Allen of Dowdales School

One to fifty is available on an interactive excel spreadsheet.

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Suitability & flexibility

This game has been used with years 7 through 11 and works every time. For lower attaining groups less random numbers could be used, or calculators could be provided for individuals.

How to play

You need this OHT grid. Project this onto a whiteboard as the game board. I shall refer to each "square" as a *cell*.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

The numbers on the grid need to be marked with circles or squares in red or blue like this;

①	②	③	4	⑤	6	⑦	⑧	9	⑩
11	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳
㉑	㉒	㉓	㉔	㉕	㉖	㉗	28	㉙	30
⑳	㉑	33	㉔	㉕	㉖	㉗	㉘	㉙	㉚
㉑	㉒	㉓	㉔	㉕	46	㉗	48	㉙	㉚

The pupils are in five teams. Each team is given five random numbers generated by rolling a variety of dice. This is best recorded in a table on the board;

Team	Numbers	Score
1	8 7 11 12 10	

2	3	7	2	1	6
3	10	6	1	4	3
4	10	2	5	14	4
5	6	8	7	2	13

The teams take it in turns to use their random numbers to make a number from 1 to 50 using any mathematical operation. The object is to 'capture' one of the cells on the board by making the number inside it. Once a cell has been captured it cannot be captured again – cross the number out.

Scoring:

Cell captured	1pt
Each cell already captured around the captured cell	1pt each
Cell captured has a blue circle	Multiply total score by 3
Cell captured has a blue Square	+3 pts
Cell captured has a red circle	Multiply total score by 5
Cell captured has a Red Square	+5 pts

e.g. For this board;

- 25 scores $(1+2) + 5 = 8$ pts.
- 39 scores $(1+5) \times 3 = 18$ pts
- 33 scores $1+2 = 3$ pts

①	2	③	4	⑤	6	⑦	⑧	9	⑩
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
③①	32	33	③④	35	③⑥	③⑦	38	③⑨	40
④①	④②	④③	④④	④⑤	46	④⑦	48	49	⑤①

The game ends when all squares have been taken, or time runs out. Highest final score wins.

The teams start each round with new random numbers.

Why I like it

It can be used in mixed ability classes, has a fun competitive element and allows practice of basic numeracy and Bodmas.

Also, the way the scoring system is designed, each turn the potential scores get higher and higher. Most games are won in the last two turns.

Design and durability

All you need is an OHP and some dice... It lasts for a full lesson and keeps them coming back for more.

Management & resource issues

Easy to use, you only need to keep track of the score on board. Pupils can even be used to roll the dice and put up the scores. Pupils grouped into five teams works best.

Mathematical learning and thinking

This game practices basic numeracy, but also encourages pupils to play with numbers – seeing which totals can be made from a set of digits is entertaining in itself and this game uses and encourages that basic desire for enquiry.

My overall verdict

This game is very useful –quickly set up and once used the pupils can get into a game very quickly. It practices mental maths and permutation skills, but above all is Fun!

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