



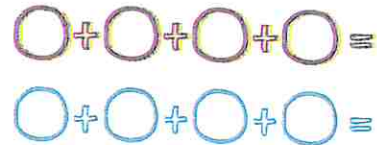
# FOUR ROLLS TO 100



This game will develop the understanding that if we know addition facts with single digit numbers, we also know how to add powers of 10. It's also great for improving number sense ... how close are we to 100?... and strategic 'if ... then ...' thinking. This is one of our favourite games but it is also the most complex and may be too much for lower attaining pupils. You could try some of the simplifications detailed below.

## RESOURCES

- 1-6 dice;
- Base board each, laminated or drawn on a whiteboard;
- A 100 square and number line might be supportive representations.



## HOW TO PLAY

- This game can be played with two people, or two teams. It could be the teacher vs. a child, or two children against each other.
- First, establish that we're going to roll a dice to make 4 numbers and our aim is to get as close to 100 as possible.
- The first player starts by rolling a dice and choosing whether the number they rolled will be kept as 'ones' or will represent 'tens'. E.g. if you roll a 4, this can be played as 4 or 40. Once chosen, this number is written in the first circle in their number sentence.
- The next player (or team) then rolls the dice and does the same, placing their number in the first circle in their number sentence.
- As you continue play, ask questions to establish the new total, who is closer to 100 now etc.
- After 4 rolls each, add up your score. Closest to 100 wins!

You will want a whiteboard to make lots of jottings for your 'if ... then ...' scenarios or to model the addition as you go along.

A very common misconception is that anything over 100 is bust, but it's not! 102 is closer to 100 than 97. Explore this on a sketched number line.

Simpler versions are:

Use a 1-3 dice and play 4 rolls to 50, or even 3 rolls to 50

Just add the 4 single numbers you roll. Highest total wins or, closest to a total of 10 wins.

## QUESTIONING

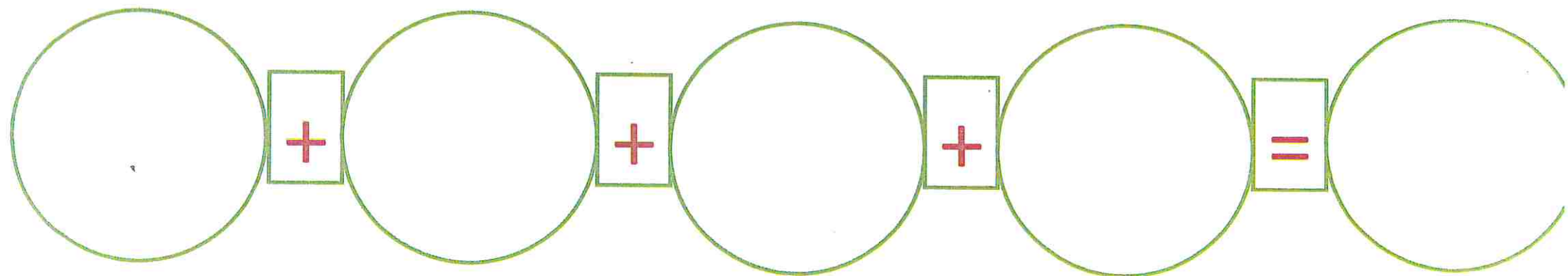
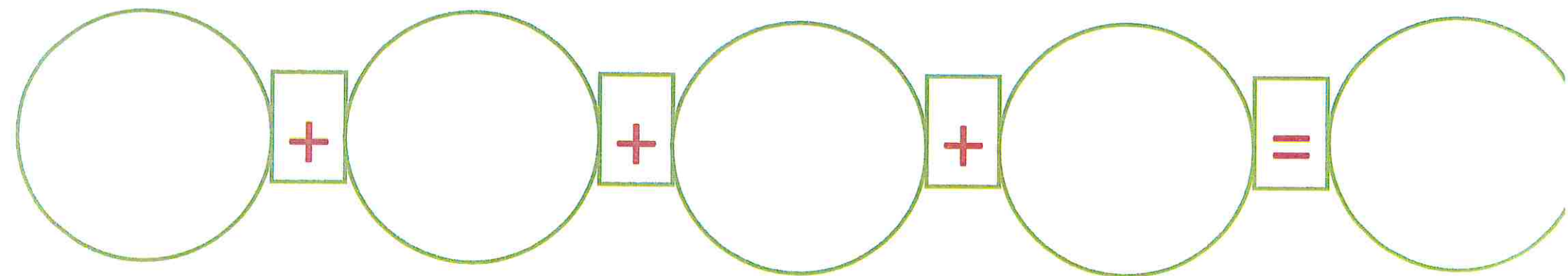
- The game gets really interesting on the 4th roll because this is when you want to ask some 'if ... then ...' questions. E.g.
  - 'You're on 90 now. If you make your 2 a 20, your new total will be 110 and if you keep it as 2, you'll be on 92. Which is closer to 100?'
  - 'You're on 60 now. What do you want to roll? What would be the worst thing to roll?'
  - 'Can you get 100 exactly with your last roll? How?'
  - 'If they roll a ... , can you still win?'
  - Ask, 'Will your 3 represent 3 ones or 3 tens?'

## WHAT TO LOOK OUT FOR AND PRAISE!

- Recalling and using known facts ... linking thinking!
- Using 'if ... then' strategic thinking to say what they want to or don't want to roll.



4 rolls to 100!



1

2

3

4

5

6

7

8

9

10

11

12

13

14

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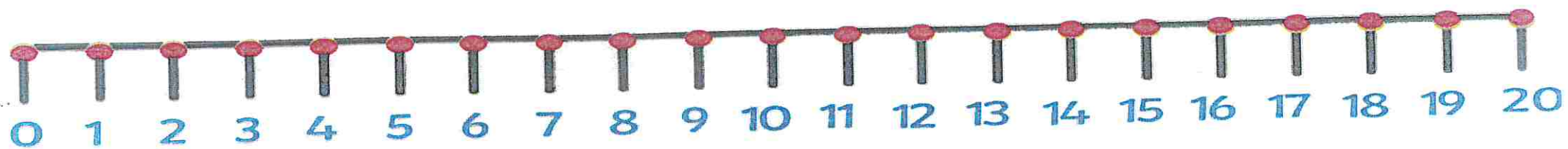
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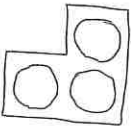


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

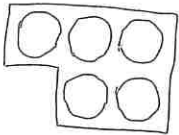
# ODD



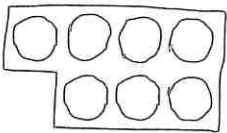
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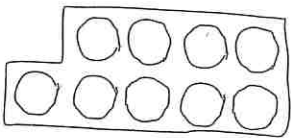
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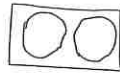
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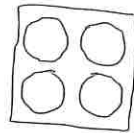
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# EVEN

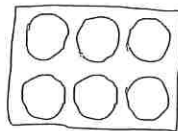
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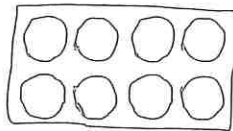
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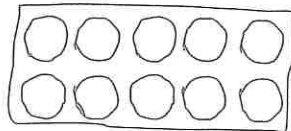
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**Ten Frame**


**Ten Frame**
