



Mathematical Learning in Reception



Aims

- Reception expectations in mathematics
- Strategies and progression
- How we teach maths (ethos) – connective model – video in action.
- Activities – lets get hands on!
- Questions



Expectations

ELG: End Learning Goal

Number: children count reliably with numbers from 1-20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.



ELG: End Learning Goal

• **Shape, space and measures:** children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.



Strategies and Progression

All learning is activity based. Over time, a greater emphasis is placed on recording maths, moving from concrete to informal and then formal methods.

Formal methods:

- Number line
- Mental methods
- Hundred squares
- Booklet progression



A green chalkboard with two pieces of pink chalk and several white chalk drawings. The drawings include a large 'V' shape, a smaller 'V' shape, and some curved lines. The background is a soft, out-of-focus green.

<http://nrich.maths.org/5572>

100 Square Jigsaw

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

time taken

next



target number

52




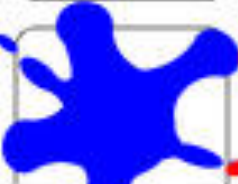






Back



5

x

2

10	8		15		12	8
8		8				6
	8		8		15	

Level: 1



<http://www.primarygames.co.uk/pgz/splat/splatre100.html>

The Connective Model

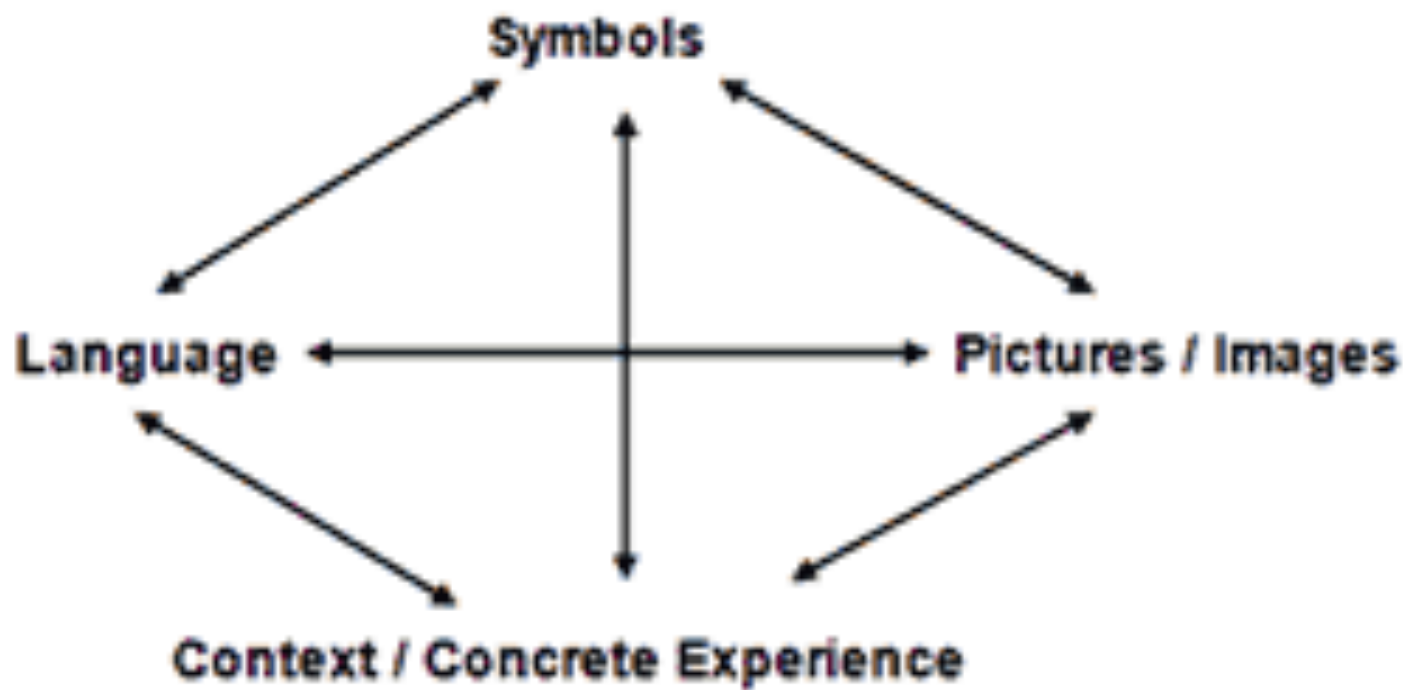
Video clip of maths taught in class

- Emphasise curriculum is taught through activities and in a context.
- Connective model



The connective model of teaching Maths

The connective model of learning mathematics

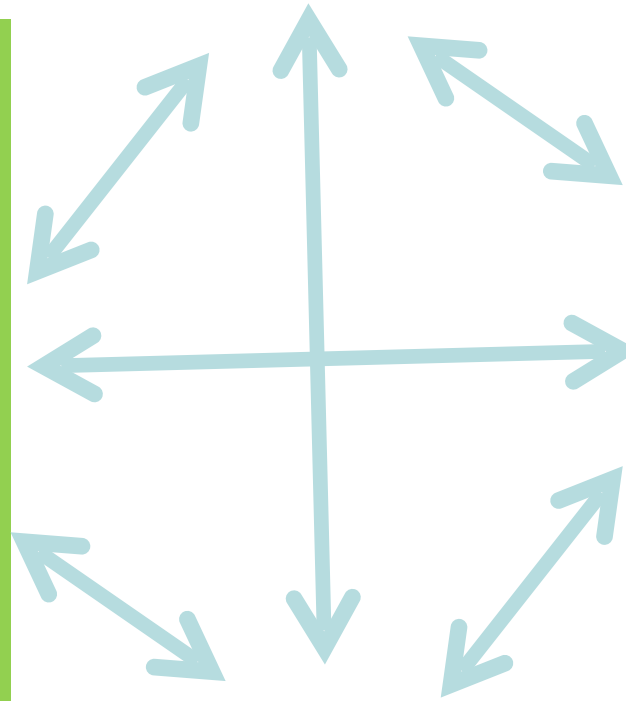


$$8 + \square = 12 \quad \text{or} \quad 12 - \square = 8$$

Symbols

Sam needs 12 fish for his tea. So far he has caught 8. How many more does he need to catch?

Language



**Picture/
Images**

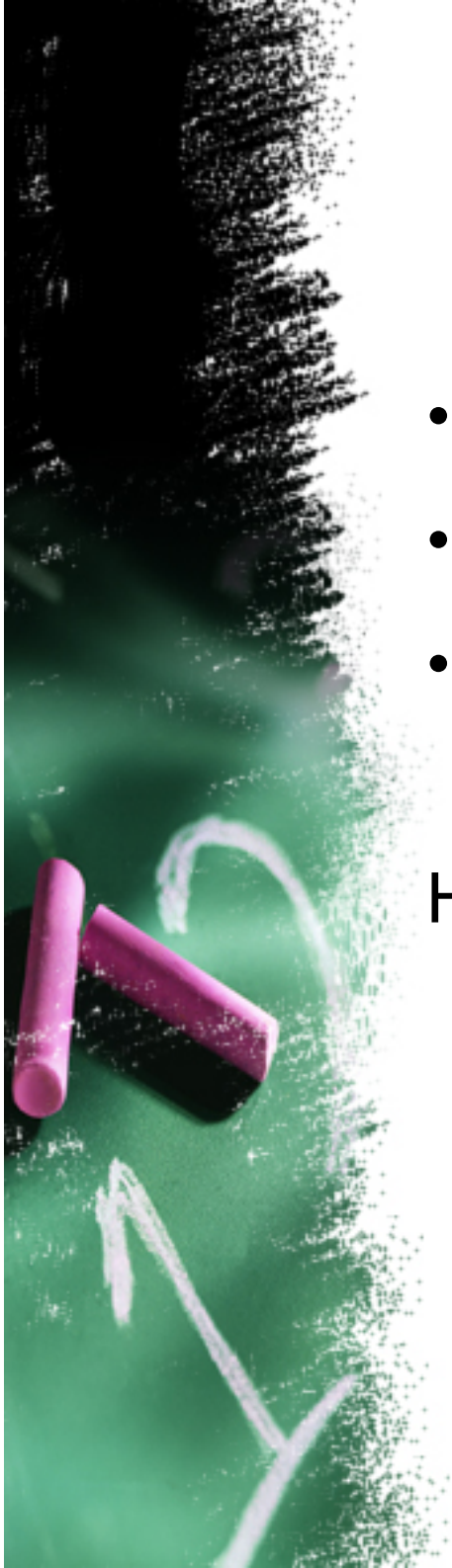


**Concrete/
Experience**

Activities

- Key vocabulary.
- Use of questioning.
- Levels of extension.

Have fun exploring. Remember to visit the estimation jar!



Questions

Estimation jar big reveal!





Thank you for coming