

**THE NUMBER SYSTEM**

Week 15, Lesson 3

**Resources**
**Starter (5 minutes)**
**More than/less than**

See Week 15, Lesson 2.

**Teacher exposition and guided practice (20 minutes)**
**Objectives**

- Understand the  $\pm 1/\pm 10$  relationship held by numbers on a number cross.

**Language to emphasise**

number cross

smallest

largest

one more

one less

above

below

to the left of

to the right of

**Teaching notes**
**Part 1**

Cut out diagrams 1 to 3 from OHT 15:3a.

 Introduce the notion of a  $\pm 1/\pm 10$  number cross by displaying OHT 15:3b and placing Diagram 1 over a cross of five numbers.

One set of 0 to 100 cards (Card set 13:1)

OHT 15:3a

OHT 15:3b

Move the cross around the 100 square, highlighting different groups of numbers, e.g.

	37	
46	47	48
	57	

Ask questions such as:

*What number is the centre of the cross? (47)*

*What is the smallest number? (37)*

*What is the difference between these 2 numbers? (10)*

*What is the largest number? (57)*

*How much larger than 47 is 57? (10)*

Lead children to realise that the numbers increase by ten as you move down through a column and consequently decrease by ten as you move up.

Ask:

*What are the numbers on either side of the middle number? (46, 48)*

*What is the difference between each of these numbers and the middle number? (1)*

Lead children to realise that the numbers increase by one as you move across the row to the right and decrease by one as you move to the left.

Repeat with other examples as time allows. Use Diagrams 2 and 3. Place the number crosses in different places on the 100-square. Invite children to explain what the hidden numbers are and how they worked them out.

### **Practice and consolidation (15 minutes)**

Discuss Workbook 3, page 4.

Do the first four examples together.

Children complete the remaining examples on their own or with a partner.

Workbook 3,  
page 4

**Conclusion / recapitulation (5 minutes)**

Conclude by re-emphasising the  $\pm 1/\pm 10$  relationship held by number on the number cross.

Diagram 1




Diagram 2





Diagram 3

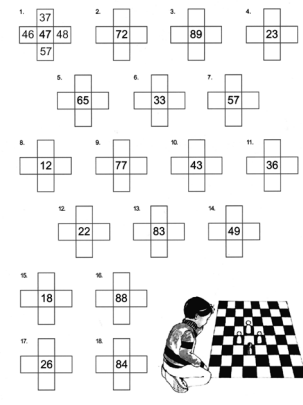


**OHT 15:3a**

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

**OHT 15:3b**

**The number cross**  
Fill in the missing numbers on each number cross.



**Workbook 3, page 4**

Diagram 1

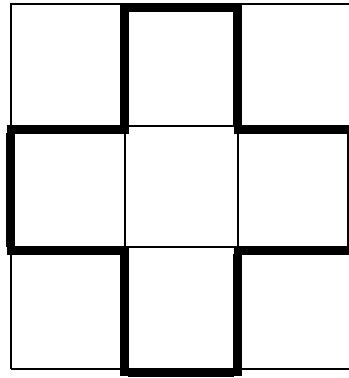


Diagram 2

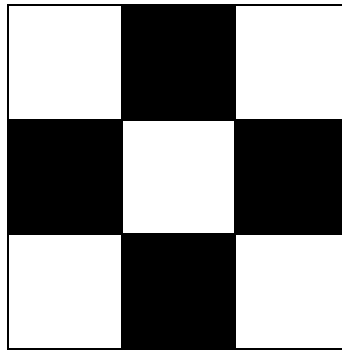
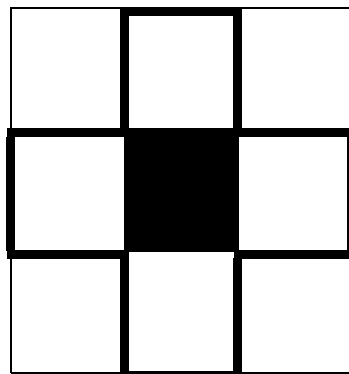


Diagram 3



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