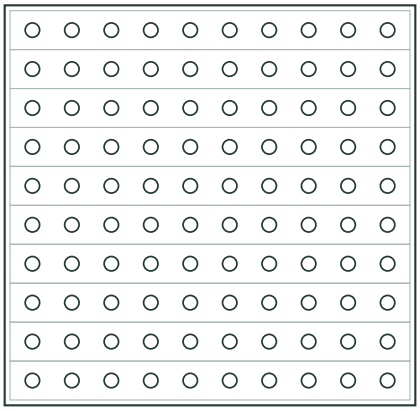
A hundred little discoveries

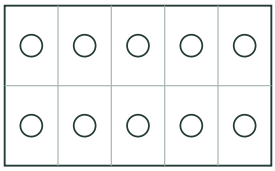
Ollie’s Hundreds, Tens & Ones Adventure



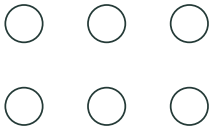
84 numbered exercises. Read, count, build, draw and explain.



1 HUNDRED



1 TEN



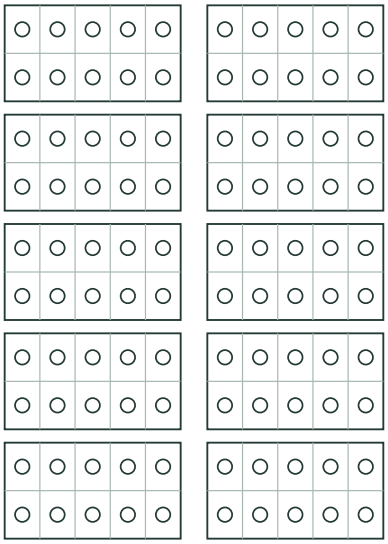
6 ONES

Start with tens and ones. A grown-up can read the instructions and help you count.

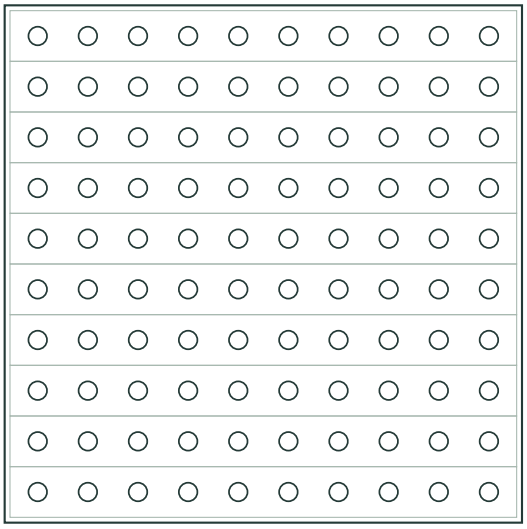
Free family practice • No timer • Colour is optional

1. Ten tens make one hundred

Each full TEN box holds 10. Ones are also called units.



10 TEN boxes



1 HUNDRED

These show the SAME 100 marks, packed in two ways. Do not count both pictures together. Each long row on the right holds 10.

1. How many TEN boxes are on the left? ____

2. Those TEN boxes are worth ____ ones.

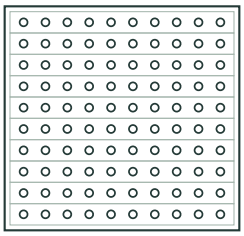
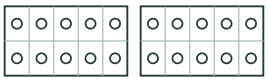
3. How many long rows are in the hundred? ____

4. One hundred has ____ tens.

2. Build 126 together

Count the groups. A hundred is worth 100; each TEN is worth 10.

126: one hundred and twenty-six

HUNDREDS	TENS	ONES
		

5. 126 = ____ hundred, ____ tens, ____ ones.

6. The 2 tens are worth ____ ones.

7. 126 = ____ + ____ + ____

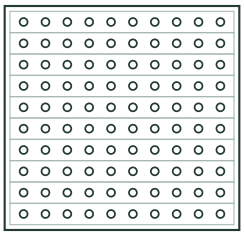
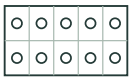
8. How many loose ones are shown? ____

We can name the same number as groups, a numeral or an expanded form. We have not made extra objects.

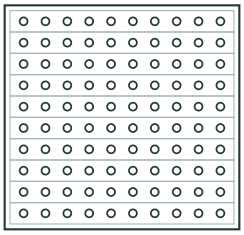
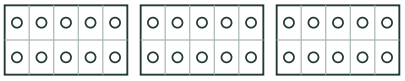
3. Count and write the number

Count hundreds first, then tens, then loose ones.

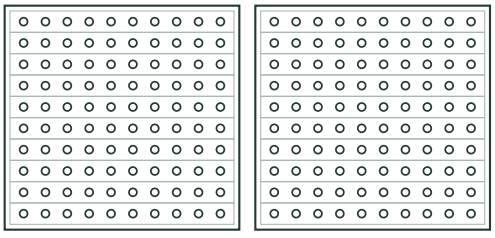
9. Number: ____

HUNDREDS	TENS	ONES
		○ ○ ○ ○

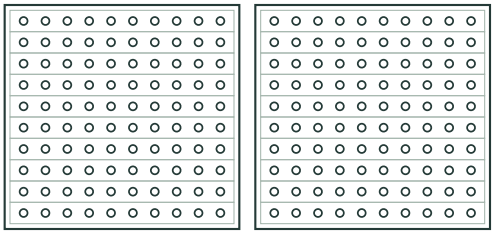
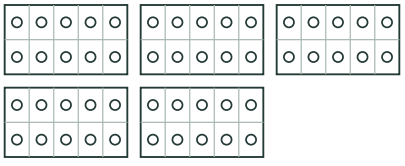
10. Number: ____

HUNDREDS	TENS	ONES
		○ ○ ○ ○ ○ ○ ○

11. Number: ____

HUNDREDS	TENS	ONES
	no tens	○ ○ ○ ○

12. Number: ____

HUNDREDS	TENS	ONES
		○ ○

4. Fill the place-value chart

Write one digit in each place. Zero means none in that place.

13. Split 162 into its places.

HUNDREDS	TENS	ONES
____	____	____

14. Split 105 into its places.

HUNDREDS	TENS	ONES
____	____	____

15. Split 230 into its places.

HUNDREDS	TENS	ONES
____	____	____

16. Split 307 into its places.

HUNDREDS	TENS	ONES
____	____	____

5. Build a three-digit number

Read the chart from HUNDREDS to TENS to ONES.

17. Build the number.

HUNDREDS	TENS	ONES
1	2	4

Number: ____

18. Build the number.

HUNDREDS	TENS	ONES
2	0	8

Number: ____

19. Build the number.

HUNDREDS	TENS	ONES
3	6	0

Number: ____

20. Build the number.

HUNDREDS	TENS	ONES
4	0	7

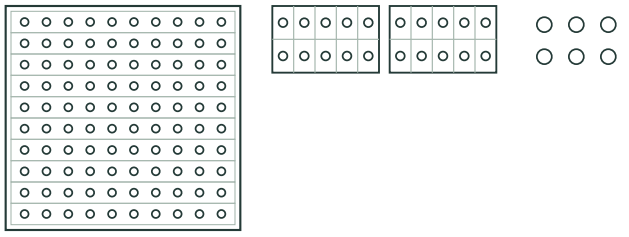
Number: ____

6. Match numbers and pictures

Write A, B, C or D. Each letter is used once.

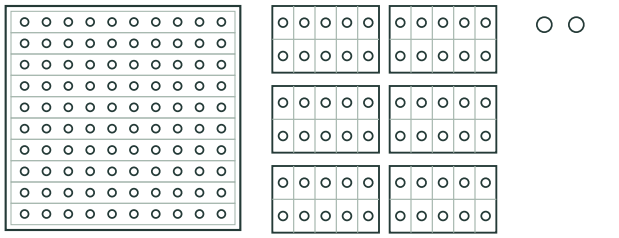
Picture A

HUNDREDS TENS ONES



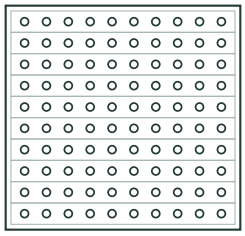
Picture B

HUNDREDS TENS ONES



Picture C

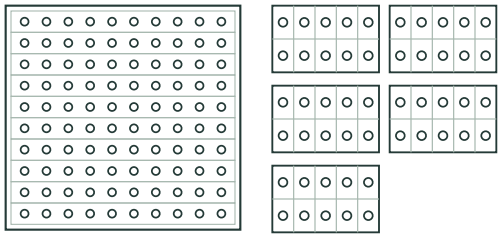
HUNDREDS TENS ONES



no tens

Picture D

HUNDREDS TENS ONES



21. 150 → ____

22. 126 → ____

23. 105 → ____

24. 162 → ____

7. Number words with help

Word bank: six (6) • sixty (60) • five (5) • fifty (50).

25. 126:

one hundred and twenty-_____

26. 162:

one hundred and _____-two

27. 105:

one hundred and _____

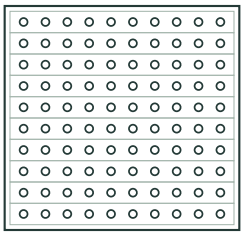
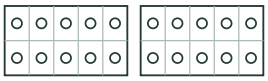
28. 150:

one hundred and _____

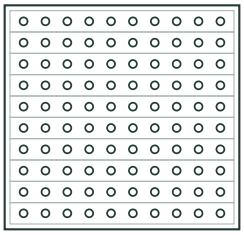
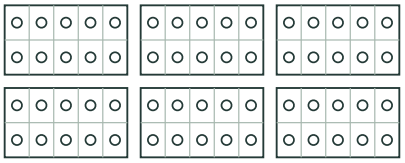
8. Name the value of each place

Example: 134 = 100 + 30 + 4. Keep zero places, too.

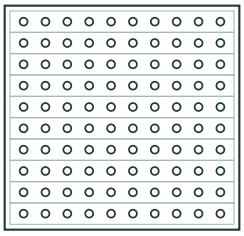
29. 126 = ____ + ____ + ____

HUNDREDS	TENS	ONES
		

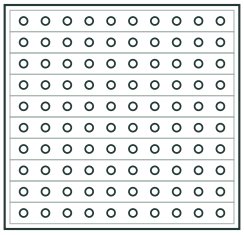
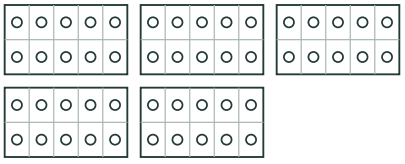
30. 162 = ____ + ____ + ____

HUNDREDS	TENS	ONES
		

31. 105 = ____ + ____ + ____

HUNDREDS	TENS	ONES
	no tens	

32. 150 = ____ + ____ + ____

HUNDREDS	TENS	ONES
		no loose ones

9. Put the parts into a numeral

The + joins place values here; this is not a column-addition lesson.

33. 200 + 10 + 8 = _____

Whole number: _____

34. 300 + 0 + 4 = _____

Whole number: _____

35. 400 + 70 + 0 = _____

Whole number: _____

36. 500 + 0 + 9 = _____

Whole number: _____

10. What is the digit worth?

Look at the underlined digit. Its place tells its value.

37. Find the underlined digit’s value.

1<u>2</u>6 Worth: ____

38. Find the underlined digit’s value.

16<u>2</u> Worth: ____

39. Find the underlined digit’s value.

<u>2</u>45 Worth: ____

40. Find the underlined digit’s value.

3<u>5</u>1 Worth: ____

11. Find the missing digit

Use the three given places. Fill only the square.

41. 3 hundreds, 4 tens, 2 ones

3□2 Missing: ____

42. 2 hundreds, 0 tens, 8 ones

2□8 Missing: ____

43. 1 hundred, 7 tens, 0 ones

□70 Missing: ____

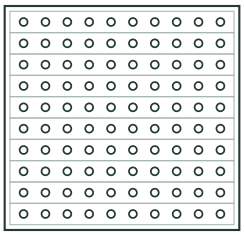
44. 4 hundreds, 0 tens, 5 ones

40□ Missing: ____

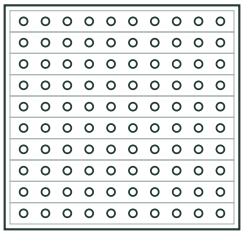
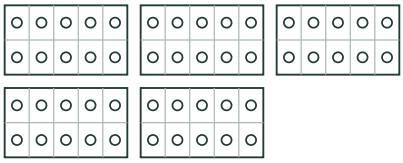
12. Zero holds a place

Circle A or B. A missing group does not remove the place.

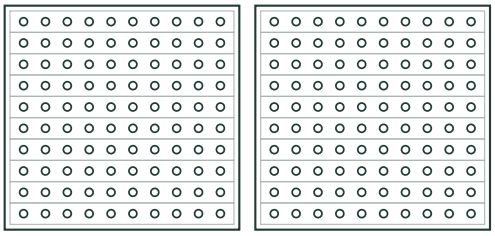
45. A: 105 B: 15

HUNDREDS	TENS	ONES
	no tens	○ ○ ○ ○ ○

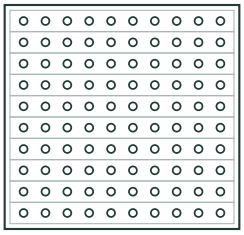
46. A: 105 B: 150

HUNDREDS	TENS	ONES
		no loose ones

47. A: 26 B: 206

HUNDREDS	TENS	ONES
	no tens	○ ○ ○ ○ ○ ○

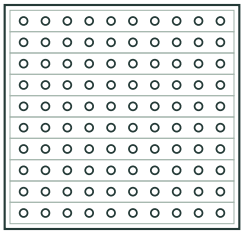
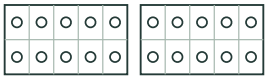
48. A: 108 B: 180

HUNDREDS	TENS	ONES
	no tens	○ ○ ○ ○ ○ ○ ○ ○

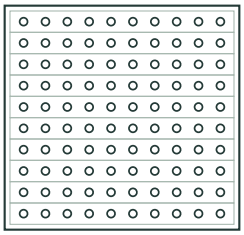
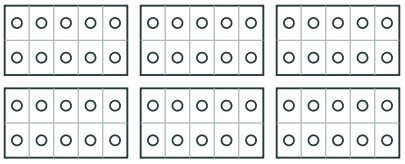
13. Same digits, different values

Compare pictures A and B. Keep their groups separate.

Picture A

HUNDREDS	TENS	ONES
		

Picture B

HUNDREDS	TENS	ONES
		

49. Picture A shows ____.

50. Picture B shows ____.

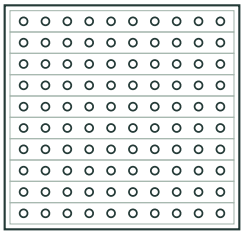
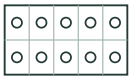
51. In picture A’s number, the 2 is worth ____.

52. In picture B’s number, the 2 is worth ____.

14. Finish a number picture

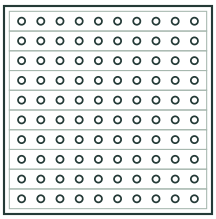
Example: 114 has 1 hundred, 1 TEN box and 4 loose ones.

Worked drawing example: 114

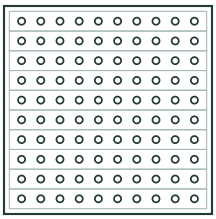
HUNDREDS	TENS	ONES
		○ ○ ○ ○

The hundred is printed. Add only TEN boxes and loose ones.

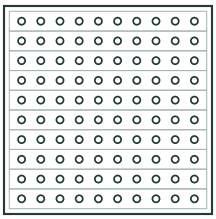
53. Make 112.

HUNDRED	TENS	ONES
		

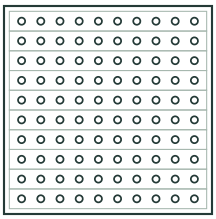
54. Make 121.

HUNDRED	TENS	ONES
		

55. Make 103.

HUNDRED	TENS	ONES
		

56. Make 130.

HUNDRED	TENS	ONES
		

15. Help Ollie fix his ideas

These ideas need fixing. Use the groups to explain why.

57. “In 126, the 2 means 2 ones.”

The 2 means ____ tens, worth ____.

58. “105 has 5 tens.”

Correct number of tens: ____

59. “150 and 105 are the same.”

Circle: SAME / DIFFERENT

60. “307 means 3 hundreds and 7 tens.”

Fix it: ____ hundreds, ____ tens, ____ ones.

16. Packing stories

A big pack holds 100 pencils. A TEN box holds 10. Loose pencils are ones.

61. 1 big pack, 2 TEN boxes, 4 loose pencils.

Altogether: _____ pencils

62. 2 big packs, 0 TEN boxes, 6 loose pencils.

Altogether: _____ pencils

63. 1 big pack, 5 TEN boxes, 0 loose pencils.

Altogether: _____ pencils

64. 3 big packs, 1 TEN box, 2 loose pencils.

Altogether: _____ pencils

17. Read the number clues

Write the numeral. Every clue you need is on this page.

65. I have 2 hundreds, 7 tens and 1 one.

My number: _____

66. My hundreds digit is 4, tens digit 0, ones digit 9.

My number: _____

67. My 3 is worth 300. I have 2 tens and 8 ones.

My number: _____

68. I have 1 hundred, no tens and no loose ones.

My number: _____

18. Build it in different ways

Place values stay the same, however we describe the groups.

69. HUNDREDS: 2 TENS: 6 ONES: 3

Number: ____

70. 600 + 0 + 4 = _____

71. What is the underlined digit worth?

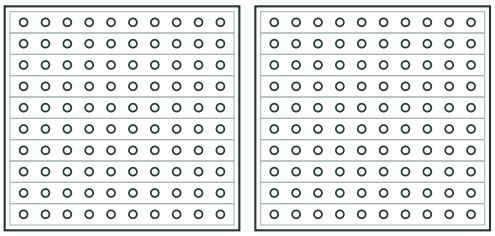
7<u>0</u>8 Worth: ____

72. Optional stretch: swap the hundreds and tens digits in 126. Now 2 hundreds, 1 ten and 6 ones. Number? ____

19. Put the ideas together

Count, split, read a digit and write the expanded form.

73. Number: ____

HUNDREDS	TENS	ONES
	no tens	○ ○ ○ ○ ○

74. 390 = ____ hundreds, ____ tens, ____ ones.

75. What is the underlined digit worth?

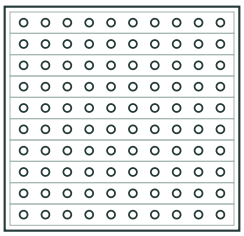
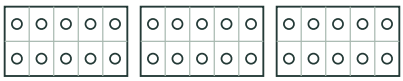
742 Worth: ____

76. 608 = ____ + ____ + ____

Calm review • eight questions

No timer. Point, draw or write. Answers are on pages 23–24.

77. What number is shown? ____

HUNDREDS	TENS	ONES
		

78. 105 = ____ hundred, ____ tens, ____ ones.

79. In 162, what is the 2 worth? ____

80. In 126, what is the 2 worth? ____

81. 2 hundreds, 0 tens, 7 ones: 2□7

Missing digit: ____

82. 300 + 40 + 6 = _____

83. Ten tens are worth ____ ones.

84. 1 hundred, 0 tens, 5 ones. Circle: 105 / 15

For the grown-up

Start with the groups

For a learner who already understands tens and ones, with adult support. One hundred is 10 rows of 10 marks. A TEN box has 2 rows of 5 marks. Loose circles are ones (also called units). Keep the same objects in mind when they are packed; do not count a before-and-after picture twice.

A place tells the value

126 = 100 + 20 + 6. In 162 the 2 is worth 2, not 20. In 105 there are no tens, but the tens place is still there. 105 is not 15; 150 is not 105. Zero can hold an empty place. The + in an expanded form joins place values; no column-addition procedures or borrowing are practised here.

Drawing and number words

On page 15 the hundred is already printed. Add only the requested TEN boxes and loose circles. Every drawn TEN needs exactly 10 marks. Accept any arrangement with the right counts. Both “one hundred twenty-six” and “one hundred and twenty-six” are valid ways to say 126.

Use a little at a time

There are 84 primary numbered tasks including eight review questions and one optional stretch. A multi-blank prompt counts as one task. Use several short sessions; no timer or pass mark. No school-grade, teacher-review or curriculum guarantee is claimed.

Printing and permission

Print US Letter (8.5 × 11 inches). On A4 use centred Fit to page. Colour is optional; physical printing is untested. You may print this PDF as often as needed for your own family or one class you teach. You may not resell the PDF or post the downloadable files publicly. Share playollie.com so others can get their own copy.

About the artwork

Counting pictures and layout are original controlled vector drawings. Ollie is the supplied existing PlayOllie mascot, reused from the lesson’s documented assets. The DejaVu font licence remains unaffected by the printing permission. No stock or generated counting pictures are used.

Answer key • tasks 1–44

H = hundreds, T = tens, O = ones. Find the worksheet page and task.

Page 2 1: 10. 2: 100. 3: 10. 4: 10.

Page 3 5: 1 H, 2 T, 6 O. 6: 20. 7: 126 = 100 + 20 + 6. 8: 6.

Page 4 9: 114. 10: 137. 11: 204. 12: 252.

Page 5 13: 1 H, 6 T, 2 O. 14: 1 H, 0 T, 5 O. 15: 2 H, 3 T, 0 O. 16: 3 H, 0 T, 7 O.

Page 6 17: 124. 18: 208. 19: 360. 20: 407.

Page 7 21: D. 22: A. 23: C. 24: B.

Page 8 25: six. 26: sixty. 27: five. 28: fifty.

Page 9 29: 126 = 100 + 20 + 6. 30: 162 = 100 + 60 + 2. 31: 105 = 100 + 0 + 5. 32: 150 = 100 + 50 + 0.

Page 10 33: 218. 34: 304. 35: 470. 36: 509.

Page 11 37: 20. 38: 2. 39: 200. 40: 50.

Page 12 41: 4. 42: 0. 43: 1. 44: 5.

Drawing check (53–56): the printed hundred stays. Every added TEN has 10 marks. Loose ones must match exactly; layout may vary.

Answer key • tasks 45–84

H = hundreds, T = tens, O = ones. Find the worksheet page and task.

Page 13 45: A (105). 46: B (150). 47: B (206). 48: A (108).

Page 14 49: 126. 50: 162. 51: 20. 52: 2.

Page 15 53: Add 1 TEN box, 2 loose ones. 54: Add 2 TEN boxes, 1 loose one. 55: Add 0 TEN boxes, 3 loose ones. 56: Add 3 TEN boxes, 0 loose ones.

Page 16 57: 2 tens, worth 20. 58: 0 tens. 59: Different; the tens and ones have different values. 60: 3 H, 0 T, 7 O.

Page 17 61: 124 pencils. 62: 206 pencils. 63: 150 pencils. 64: 312 pencils.

Page 18 65: 271. 66: 409. 67: 328. 68: 100.

Page 19 69: 263. 70: 604. 71: 0. 72 (optional): 216.

Page 20 73: 205. 74: 3 H, 9 T, 0 O. 75: 700. 76: 608 = 600 + 0 + 8.

Page 21 77: 134. 78: 1 H, 0 T, 5 O. 79: 2. 80: 20. 81: 0. 82: 346. 83: 100. 84: 105.

Drawing check (53–56): the printed hundred stays. Every added TEN has 10 marks. Loose ones must match exactly; layout may vary.