Activities between Years 3 and 4

Mathseeds

SUMMER

FUN PACK

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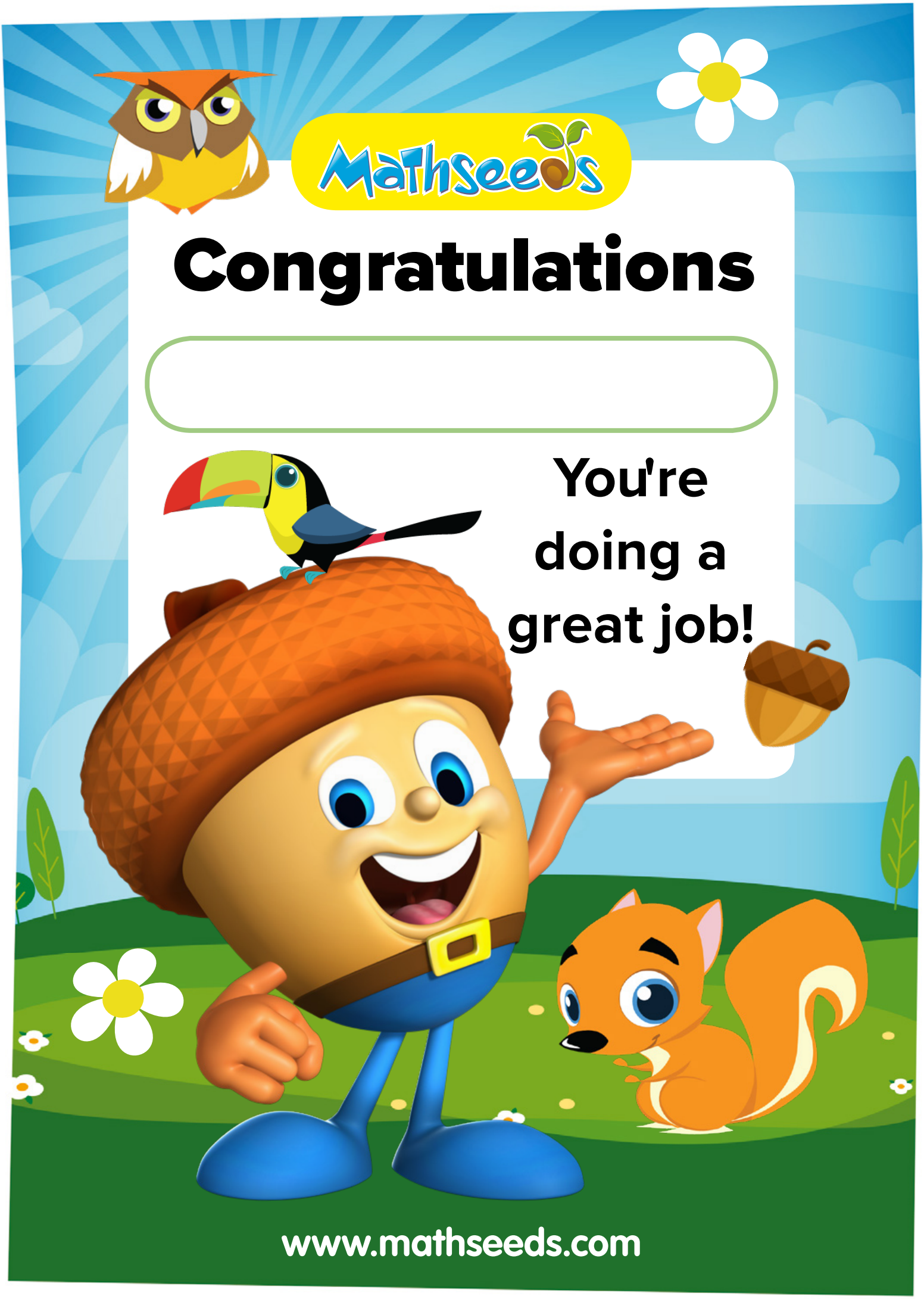
Congratulations

You're doing a great job!



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Woohoo

Way to go!

Get Ready for Year 4

Numbers 1000 to 5000
Online lesson: Lesson 151 – Counting 1000 to 5000
Worksheets: Tens, Hundreds, and Thousands, Order 4-digit Numbers

Symmetry
Online lesson: Lesson 152 – Symmetry
Worksheets: Lines of Symmetry, Identify Symmetry

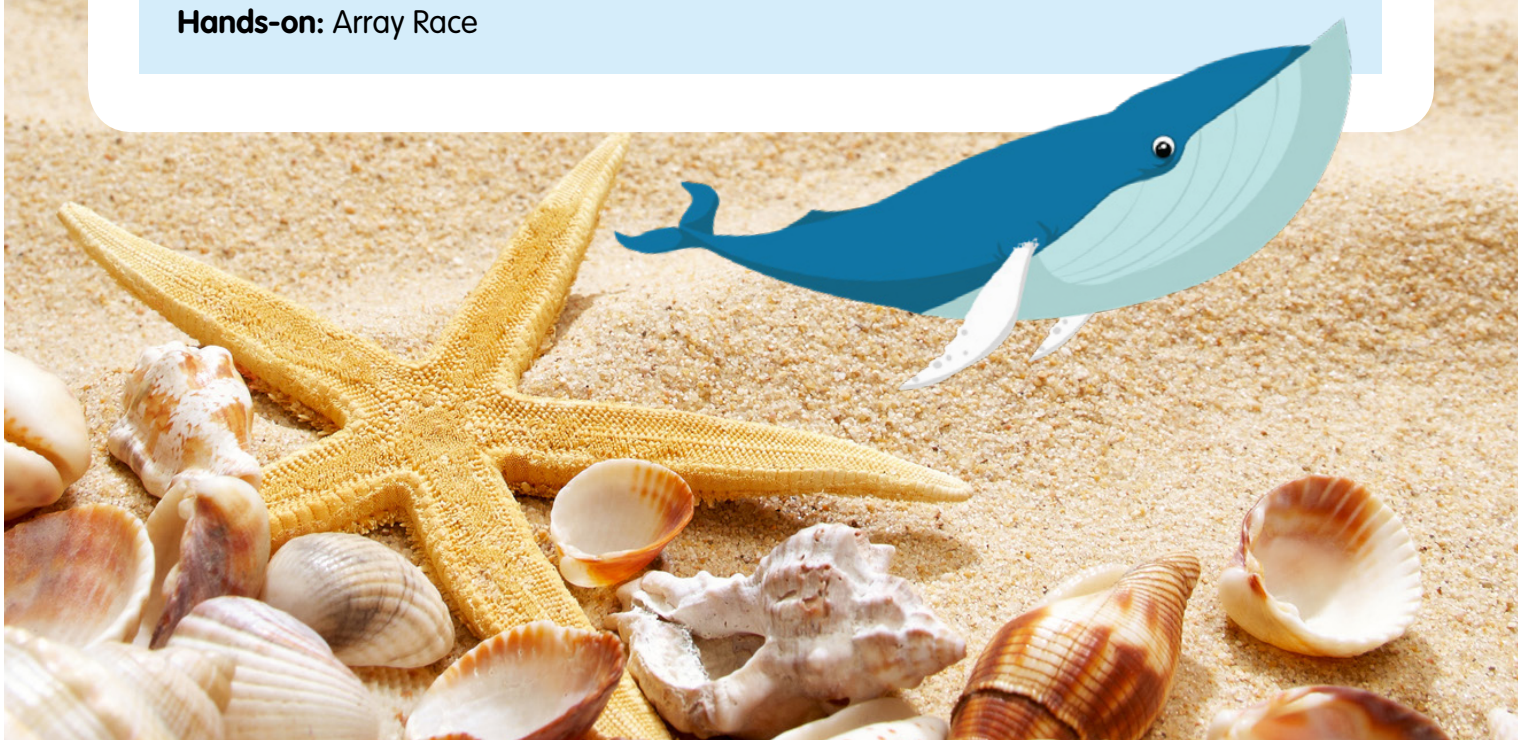
Number Patterns: 2-step Rules
Online lesson: Lesson 153 – Number patterns 2
Worksheets: Follow the Rules, What is the Rule?

Measuring Capacity
Online lesson: Lesson 154 – Litres and Millilitres
Worksheets: Litres and Millilitres, Measure Capacity

Multiplication Revision
Online lesson: Lesson 155 – Multiplication revision
Worksheets: Skip Count to Multiply, Multiplication Problems

Bonus

Online: Mental Minute + – Badges 88, 89, 91 and × ÷ Badges 52, 62, 73
Sheets: Dizzy's Numbers, Fibonacci Sequence, Symmetrical Pictures
Hands-on: Array Race



TENS, HUNDREDS, AND THOUSANDS

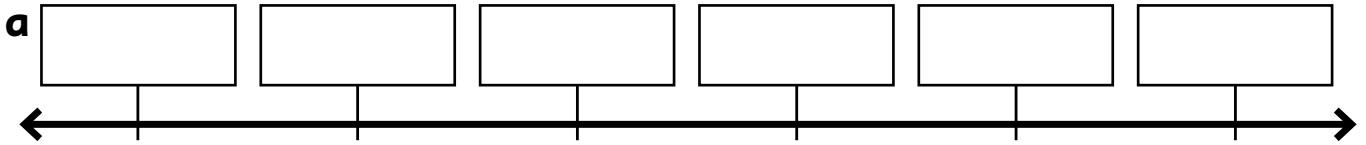
1 Fill in the missing numbers.

100	200	300	400				800	900	
1100	1200	1300	1400	1500	1600				2000
2100			2400	2500	2600	2700			
		3300				3700	3800	3900	4000
4100	4200	4300		4500	4600	4700	4800	4900	

2 Put these numbers in order on the number line.

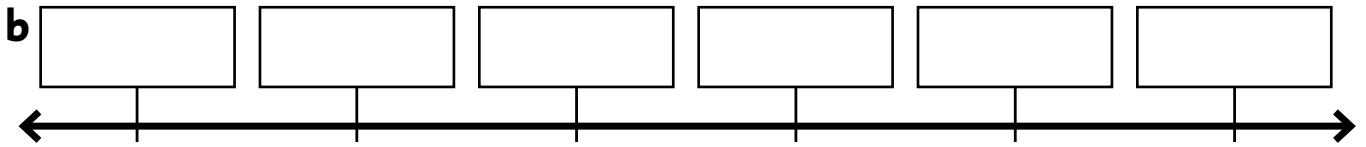
2510 2530 2550 2560 2540 2520

a



4990 4970 5000 4980 4960 4950

b



3 Put the correct symbol in the box: **< >**

a 1000 ☐ 4000 **b** 3400 ☐ 2900 **c** 1100 ☐ 1700

d 4250 ☐ 2070 **e** 1400 ☐ 1900 **f** 3560 ☐ 3760

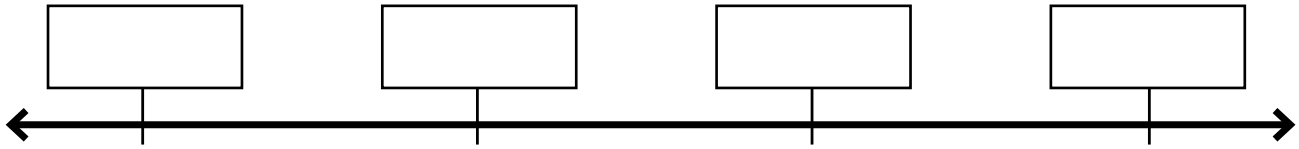
g 3500 ☐ 3600 **h** 4440 ☐ 4410 **i** 2110 ☐ 2010

j 2930 ☐ 2970 **k** 3870 ☐ 3880 **l** 1950 ☐ 1780

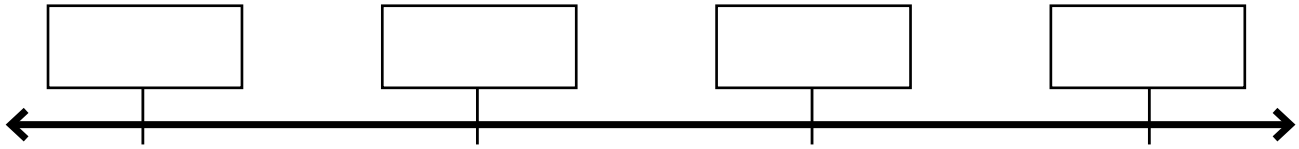
ORDER 4-DIGIT NUMBERS

1 Put these numbers in order on the number line.

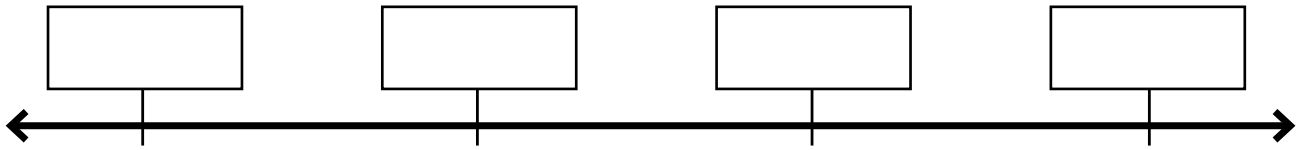
a 1563 4798 2945 3890



b 3764 1890 4902 2490



c 4398 4890 4165 4629



2 Write these numbers in order from **smallest** to **largest**.

3429 4930 2316 3781 4213

_____

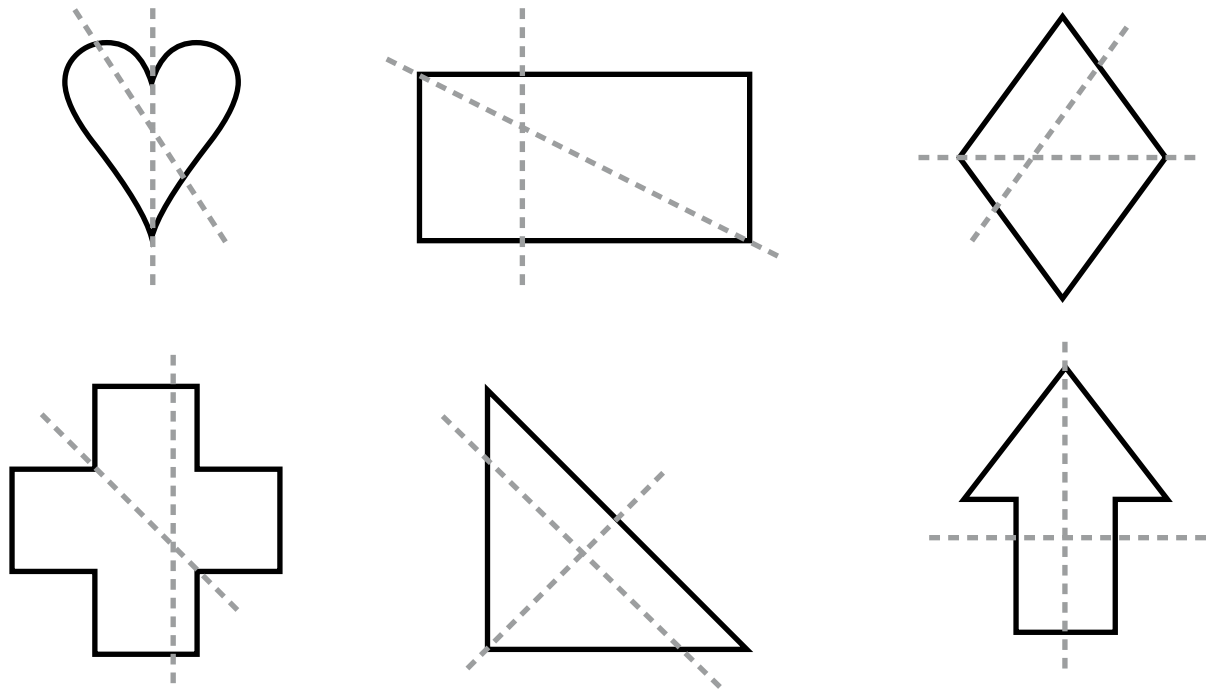
3 Write these numbers in numerals.

a two thousand, five hundred, and thirty-nine _____

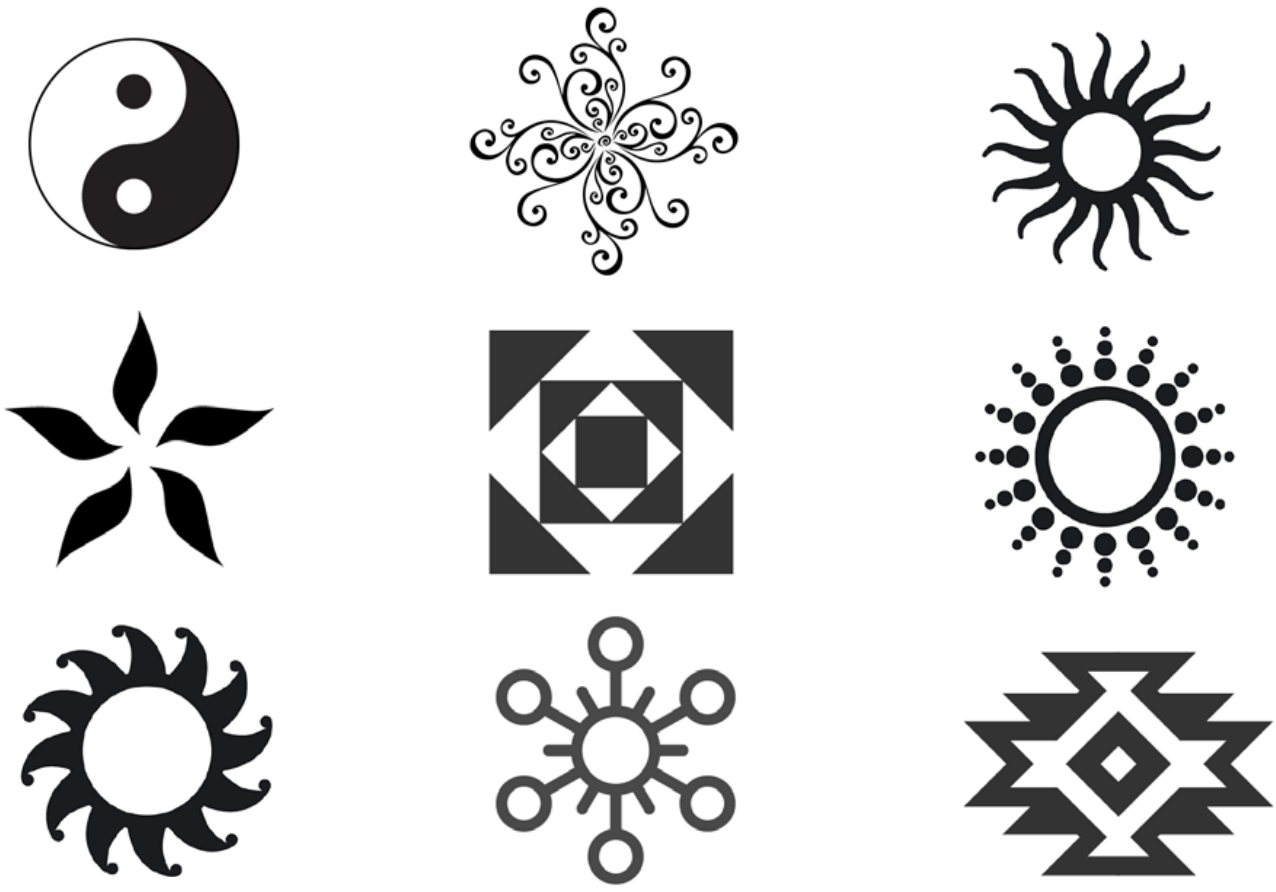
b four thousand, eight hundred, and ninety _____

LINES OF SYMMETRY

1 Trace over the lines of symmetry.

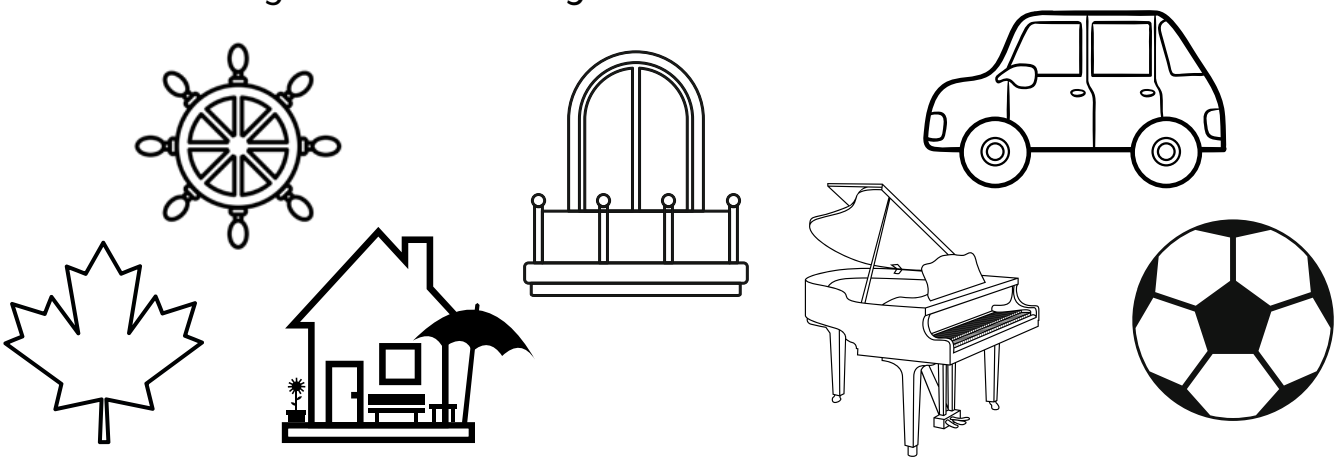


2 Draw a line of symmetry on the patterns that are symmetrical.

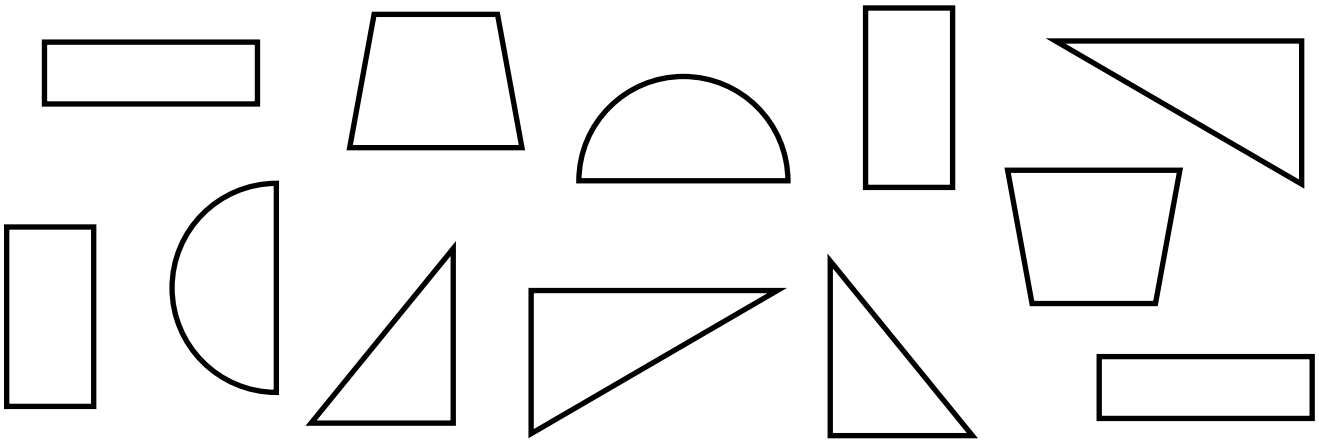


IDENTIFY SYMMETRY

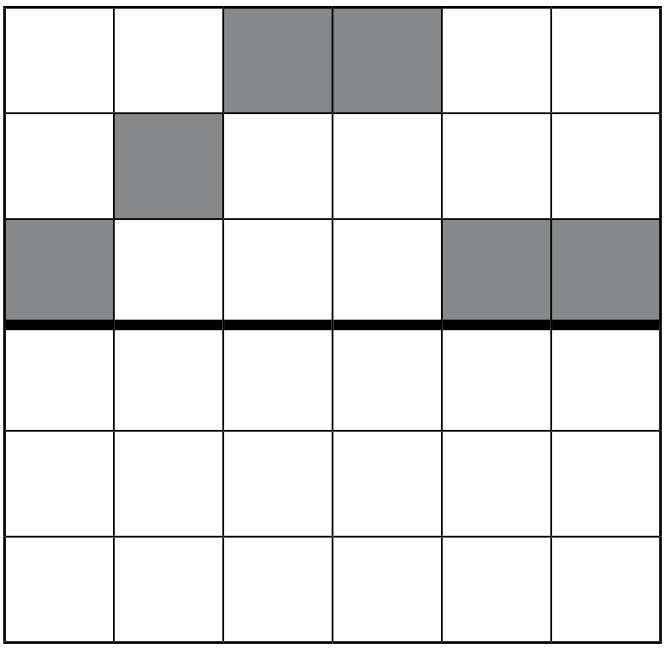
1 Circle the symmetrical things.

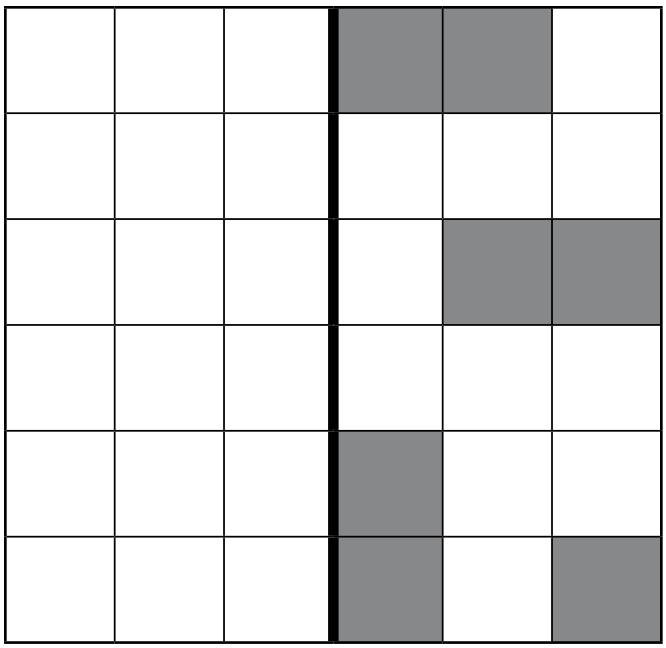


2 Colour the symmetrical halves in matching colours.



3 Complete the symmetrical patterns.





FOLLOW THE RULES

Follow the rule to complete the pattern.

a	**+3**	1	4	7					
b	**–5**	61	56	51					
c	**+2, –1**	1	3	2	4				
d	**–3, +5**	7	4	9	6				
e	**+3, +6**	13	16	22	25				
f	**–2, –4**	55	53	49	47				
g	**+10, –5**	4	14	9	19				
h	**–9, +10**	18	9	19	10				
i	**+10, +15**	5	15	30	40				
j	**–5, –4**	99	94	90	85				
k	**+13, –6**	21	34	28	41				

WHAT IS THE RULE?

1 What comes next? What is the rule?

a 15, 25, 20, 30, 25, 35, ____, ____, ____ +_____, −_____

b 23, 15, 25, 17, 27, 19, ____, ____, ____ _____, _____

c 35, 37, 40, 42, 45, 47, ____, ____, ____ _____, _____

d 99, 90, 96, 87, 93, 84, ____, ____, ____ _____, _____

e 181, 185, 184, 188, 187, ____, ____, ____ _____, _____

f 462, 460, 467, 465, 472, ____, ____, ____ _____, _____

g 854, 857, 861, 864, 868, ____, ____, ____ _____, _____

h 576, 476, 466, 366, 356, ____, ____, ____ _____, _____

i 480, 485, 478, 483, 476, ____, ____, ____ _____, _____

2 Now try these trickier ones. What is the rule?

a 1, 2, 4, 7, 11, 16, ____, ____, ____

_____

b 1, 2, 12, 112, 113, 123, 223, ____, ____, ____

_____

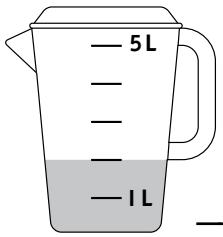
c 1, 2, 4, 8, 16, 32 ____, ____, ____

_____

LITRES AND MILLILITRES

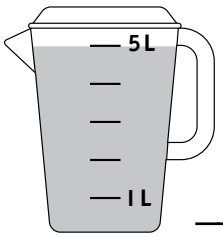
1 Write the measurement in litres, *eg* 1 L.

a



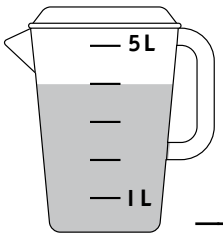
_____

b



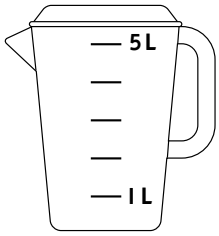
_____

c

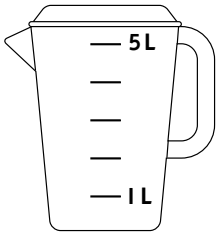


_____

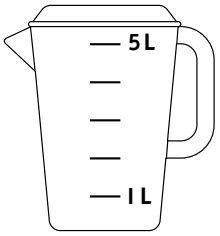
2 Colour the jugs to show the amounts.



three litres



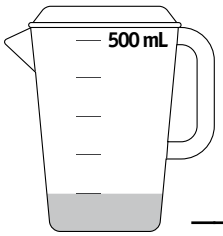
five litres



two litres

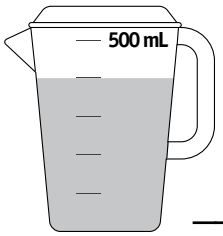
3 Write the measurement in millilitres, *eg* 200 mL.

a



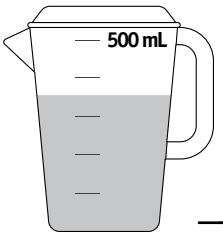
_____

b



_____

c



_____

4 Colour the jugs to show the amounts.

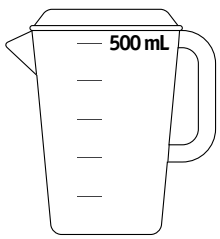
a

300 mL

b

450 mL

c

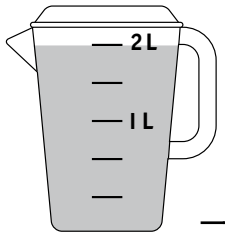


150 mL

MEASURE CAPACITY

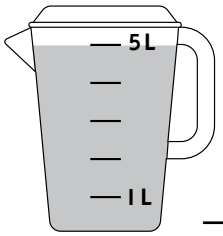
1 Write the capacity of each jug in litres.

a



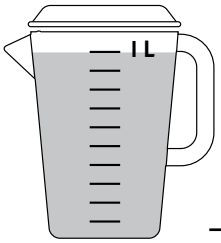
_____ L

b



_____ L

c



_____ L

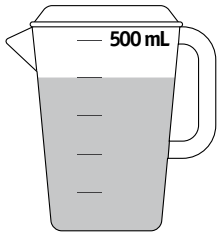
2 Write the same capacities in millilitres.

a _____ mL

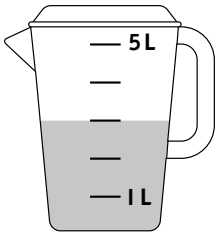
b _____ mL

c _____ mL

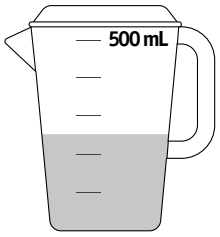
3 Which units should you write the measurement in – mL or L?



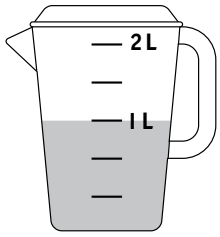
a _____



b _____



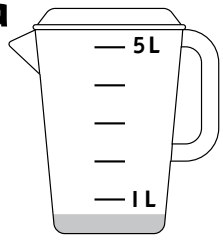
c _____



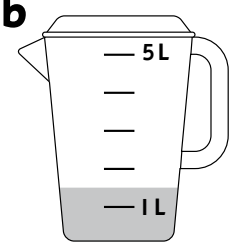
d _____

4 Match the correct label to each jug.

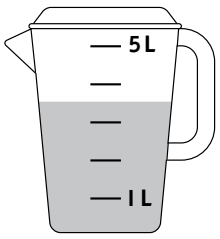
a



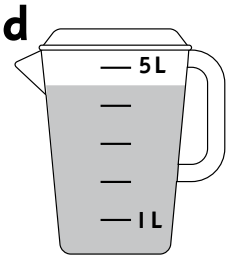
b



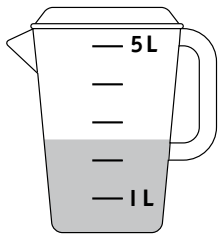
c



d



e



$3\frac{1}{2}$ L

$\frac{1}{2}$ L

$1\frac{1}{2}$ L

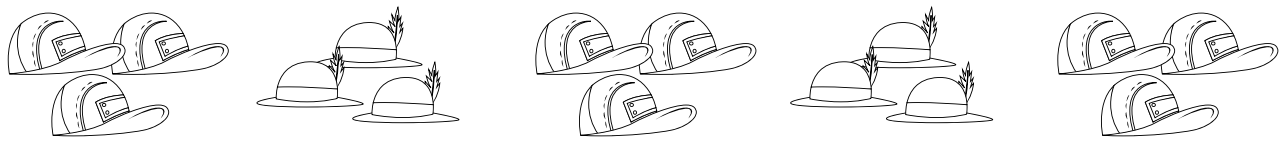
$2\frac{1}{2}$ L

$4\frac{1}{2}$ L

SKIP COUNT TO MULTIPLY

1 How many? Fill in the repeated addition.

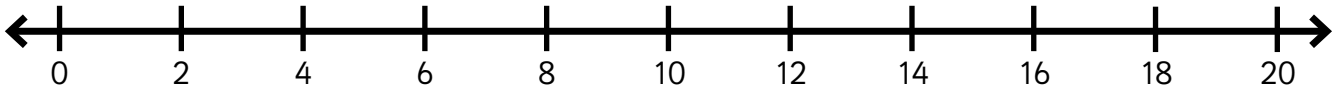
a 2 + 2 + ☐ + ☐ + ☐ + ☐ = ☐



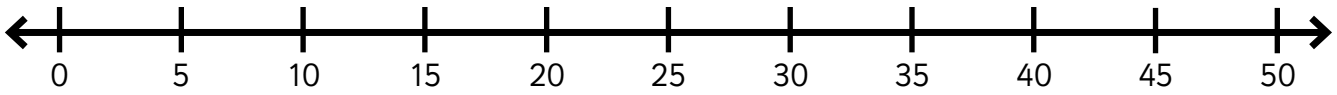
b 3, ☐, ☐, ☐, ☐

Jump along the number line to find how many.

2 I buy 8 pairs of shoes. How many shoes altogether? _____

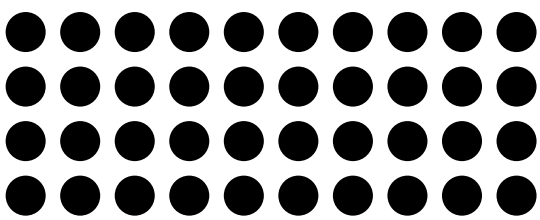


3 7 × 5 = _____



4 Write an equation to match the array.

a



☐ × ☐ = ☐

b

☐ × ☐ = ☐

MULTIPLICATION PROBLEMS

1 Ruby folds t-shirts into piles of five. She has three piles. How many shirts altogether?

☐ shirts

2 Dizzy grabs six bags of balls for game day. Each bag has ten balls in it. How many balls altogether?

☐ balls

3 Doc has five shelves with ten books on each shelf. How many books altogether?

☐ books

4 Ruby, Mrs. T, and Mango are trying on hats. They end up buying four hats each. How many hats altogether?

☐ hats

5 Mrs. T uses three tea bags for each pot of tea. She drank six pots of tea today. How many tea bags did she use?

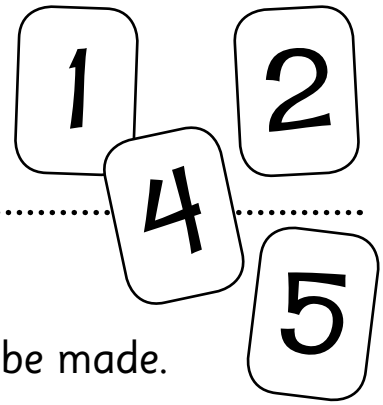
☐ bags

6 Waldo naps for ten minutes. He does this seven times today! How much extra sleep did Waldo get from his naps?

☐ mins

DIZZY'S NUMBERS

1 Dizzy has four number cards: 1, 2, 4, and 5.
How many 4-digit numbers can he make?



a Underline the question. **b** Circle the facts.

c Make a list of all the 4-digit numbers that can be made.

_____

_____

_____

_____

_____

_____

d There are _____ 4-digit numbers.

2 Mango has some questions.

a What is the largest number on the list? _____

b What is the largest number starting with 1? _____

c What is the largest number starting with 2? _____

d What is the largest number starting with 4? _____

3 How do you find the largest number in a list? Write the steps.

_____

_____

_____

_____

FIBONACCI SEQUENCE

1 Complete these sums.

$1 + 1 = \square$

$1 + 2 = \square$

$2 + 3 = \square$

$3 + 5 = \square$

2 Find the next four numbers in the Fibonacci sequence.

1, 1, 2, 3, 5, 8, $\square$, $\square$, $\square$, $\square$

3 Complete the sums for the numbers you added to the sequence.

$5 + 8 = \square$

$8 + \square = \square$

$\square + \square = \square$

$\square + \square = \square$

4 Find the next four numbers in the Fibonacci sequence.

$34 + 55 = \square$

$55 + \square = \square$

$\square + \square = \square$

$\square + \square = \square$

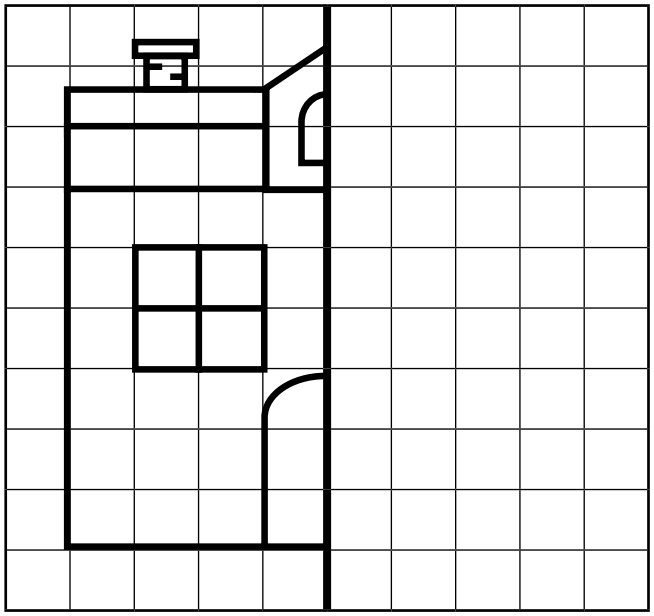
5 Explain the rule for the Fibonacci sequence.

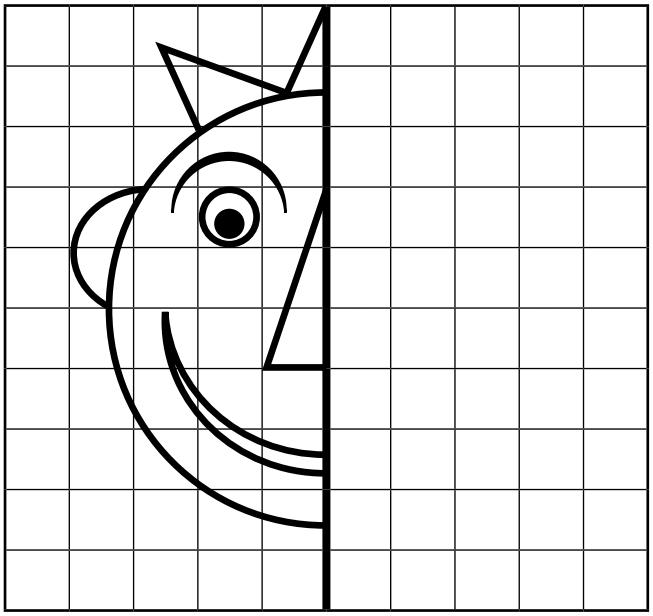
_____

_____

SYMMETRICAL PICTURES

1 Complete the symmetrical pictures.

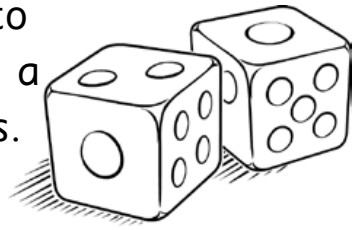




2 Draw your own symmetrical picture.

HANDS-ON: ARRAY RACE

You need a partner, a different coloured pencil each, and two dice.



1. Player A rolls both dice. Use the two numbers to colour in an array that size. For example, if roll a 5 and a 3, then you colour 5 rows of 3 squares.
2. Player B rolls the dice and colours an array.
3. Keep taking turns until one player can't fit their array in. The winner has coloured in the most squares.

Get Ready for Grade 4

Numbers 5000 to 10,000
Online lesson: Lesson 156 – Counting 5000 to 10,000
Worksheets: Base 10 Blocks, Order Numbers

Area
Online lesson: Lesson 157 – Area 3
Worksheets: Multiply for Area, Area in Square Metres

Times Tables x2, x4 **Online lesson:** Lesson
158 – Times tables (×2, ×4) **Worksheets:** 2 Times
Table, 4 Times Table

Equivalent Money
Online lesson: Lesson 159 – Equivalent Amounts of Money 2
Worksheets: Equivalent Amounts, Money Word Problems

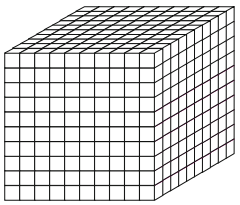
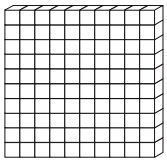
Comparing Fractions
Online lesson: Lesson 160 – Comparing and Ordering Fractions
Worksheets: Fraction Number Lines, Mixed Numbers

Bonus

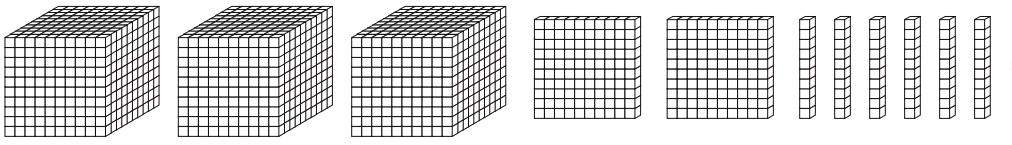
Online: Mental Minute + – Badges 92, 94, 95, 96 and × ÷ Badges 77, 81, 86, 90
Sheets: Thinking Numbers, Heads and Legs, Dizzy's Money
Hands-on: Dollhouse Furniture

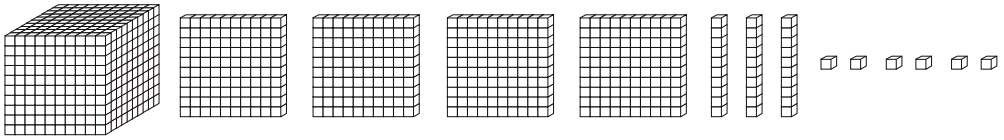
BASE 10 BLOCKS

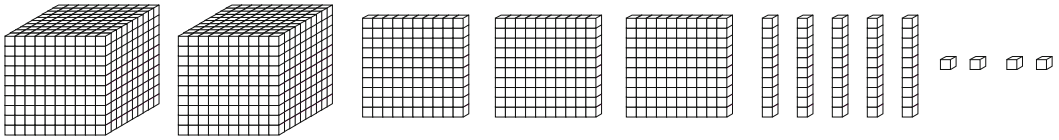
1 Draw each number in blocks.

	Thousands	Hundreds	Tens	Ones
				
a 4353				
b 6229				
c 2801				

2 What is each number?

a 

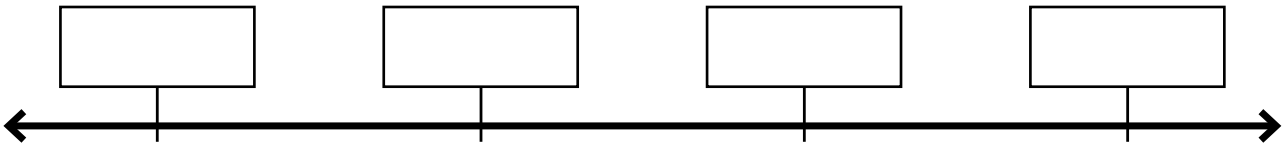
b 

c 

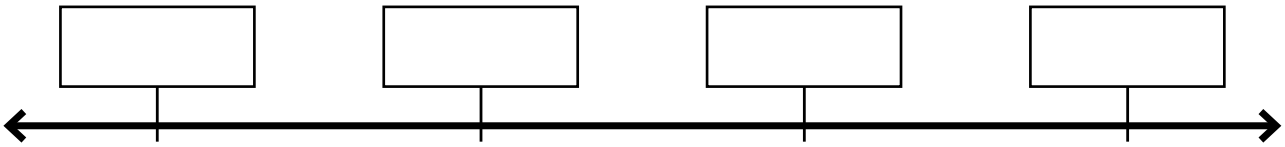
ORDER NUMBERS

1 Put these numbers in order on the number lines.

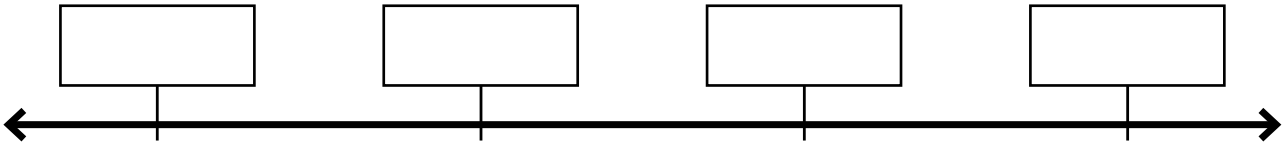
a 5329 8324 7980 6349



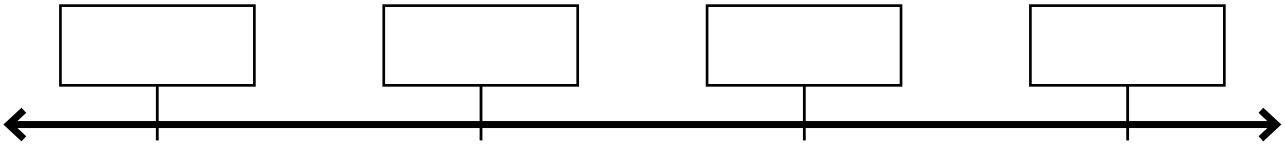
b 9342 7829 3892 5928



c 2839 4932 7439 5321



d 8172 2562 6611 4031



2 Write these numbers in order from **smallest** to **largest**.

9928, 1347, 3946, 8230, 6394

_____

3 Write these numbers in order from **largest** to **smallest**.

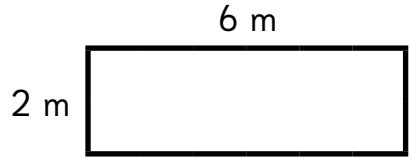
5720, 7305, 2934, 8294, 4897

_____

MULTIPLY FOR AREA

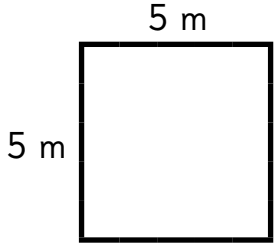
1 Calculate the area.

a



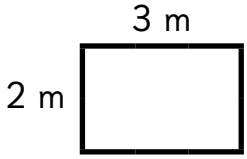
____ × ____ = ____ m^2

b



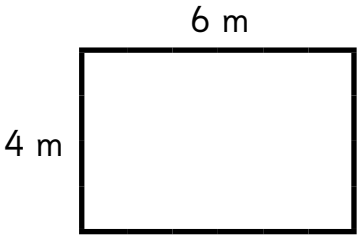
____ × ____ = ____ m^2

c



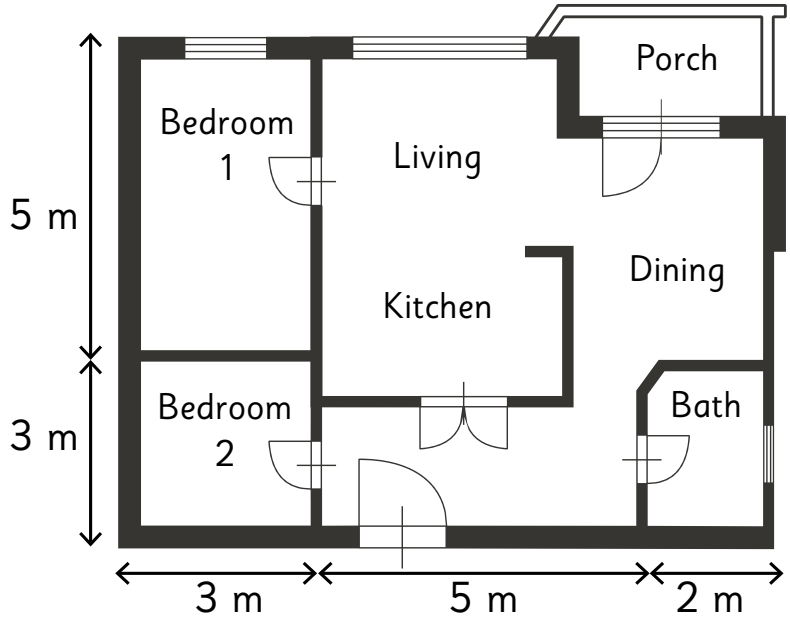
____ × ____ = ____ m^2

d



____ × ____ = ____ m^2

2 What is the area?



a Bedroom 1 is _____ m^2.

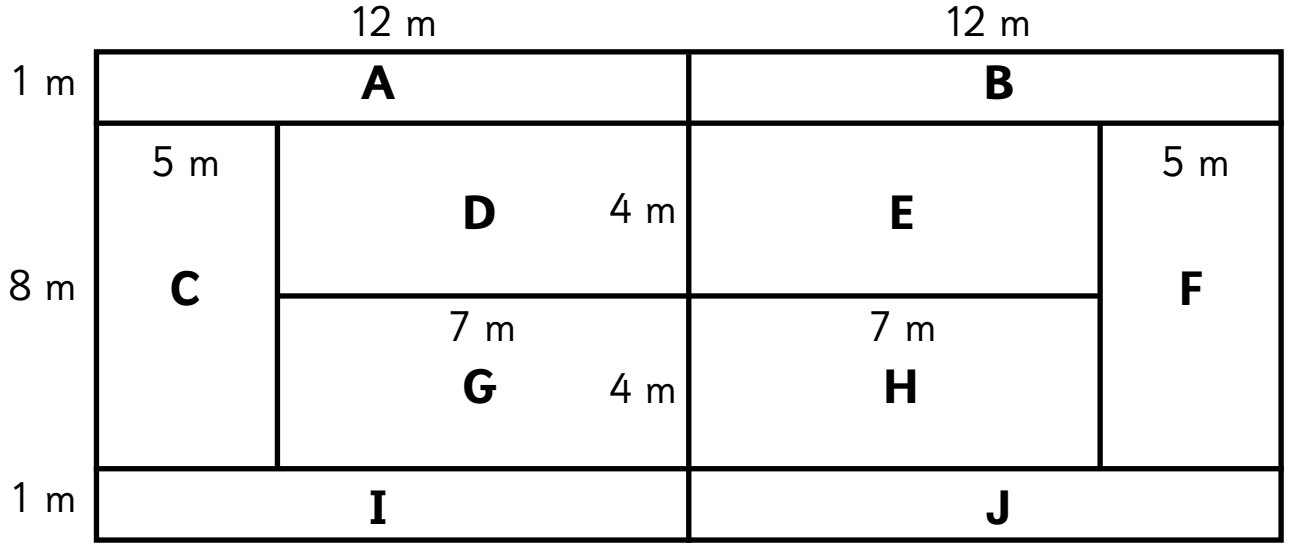
b Bedroom 2 is _____ m^2.

c The bathroom is _____ m^2.

d The house is _____ m^2.

AREA IN SQUARE METRES

1 Find the area of each section of the court in square metres.



A _____ × _____ = _____ m^2

B _____ × _____ = _____ m^2

C _____ × _____ = _____ m^2

D _____ × _____ = _____ m^2

E _____ × _____ = _____ m^2

F _____ × _____ = _____ m^2

G _____ × _____ = _____ m^2

H _____ × _____ = _____ m^2

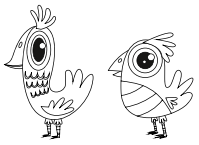
I _____ × _____ = _____ m^2

J _____ × _____ = _____ m^2

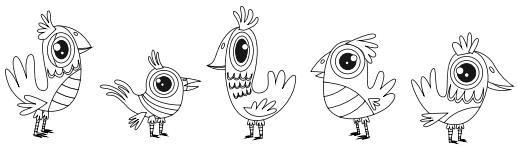
2 Can you find the area of the whole court?
Show your working out below.

2 TIMES TABLE

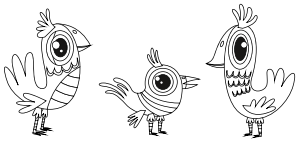
1 How many wings? Complete the equations.



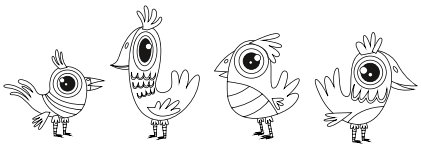
a _____ × 2 = _____



b _____ × 2 = _____

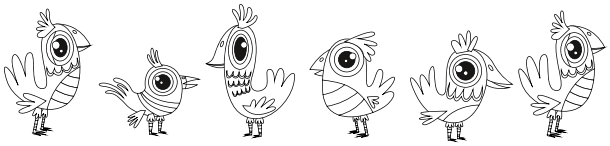


c _____ × 2 = _____



d _____ × 2 = _____

e _____ × 2 = _____



f _____ × 2 = _____

2 Find the answers.

×	0	1	2	3	4	5	6	7	8	9	10
2											

3 Complete.

a 2 × 4 = _____ × 2 = 8

b 2 × 7 = _____ × 2 = _____

c 2 × 3 = _____ × _____ = _____

d 2 × 9 = _____ × _____ = _____

e 2 × 5 = _____ × _____ = _____

f 2 × 8 = _____ × _____ = _____

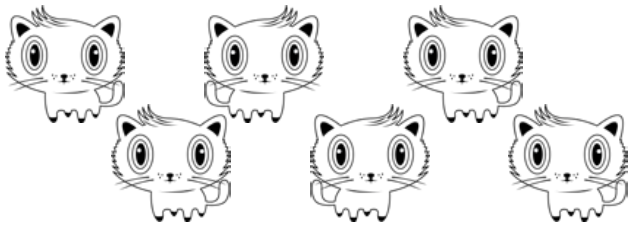
g 2 × 10 = _____ × _____ = _____

h 2 × 0 = _____ × _____ = _____

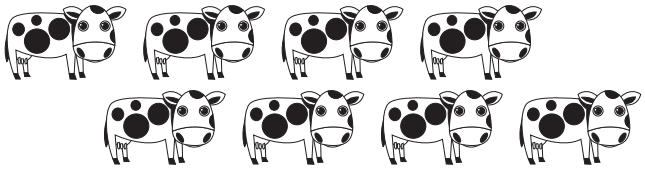
4 TIMES TABLE

1 How many legs? Complete the equations.

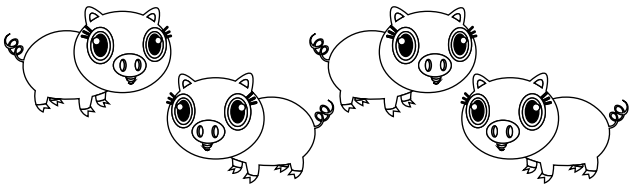
a _____ × 4 = _____



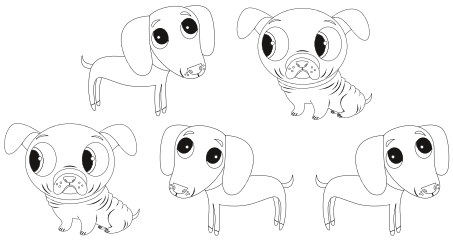
b _____ × 4 = _____



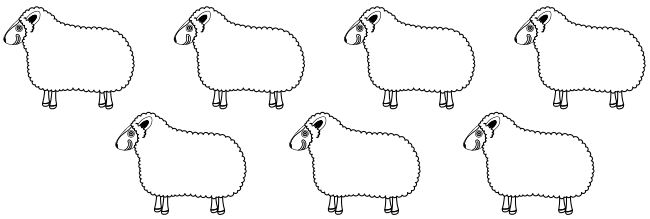
c _____ × 4 = _____



d _____ × 4 = _____



e _____ × 4 = _____



f _____ × 4 = _____

2 Find the answers.

×	0	1	2	3	4	5	6	7	8	9	10
4											

3 Complete.

a 4 × 2 = 2 × 4 = _____

b 4 × 5 = _____ × 4 = _____

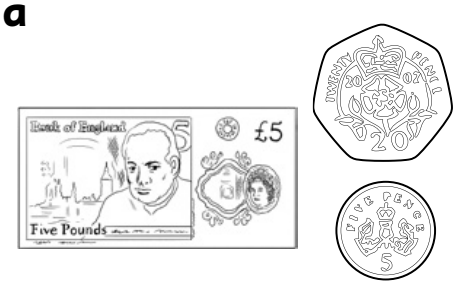
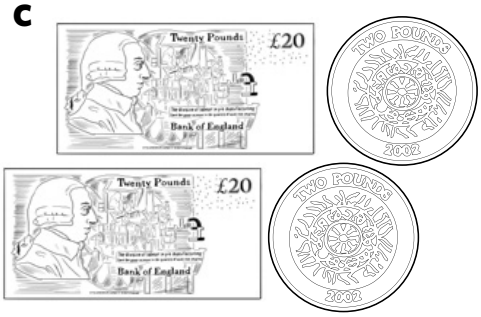
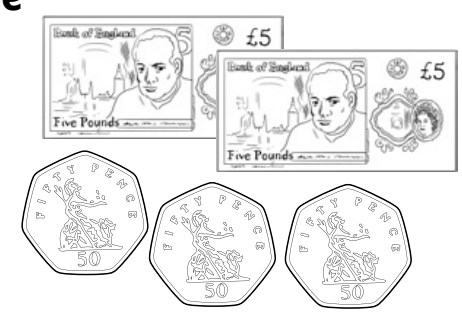
c 4 × 7 = _____ × _____ = _____

d 4 × 8 = _____ × _____ = _____

e 4 × 3 = _____ × _____ = _____

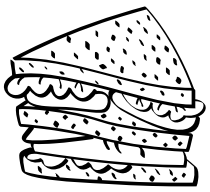
f 4 × 6 = _____ × _____ = _____

EQUIVALENT AMOUNTS

	1 How much?	**2** Write or draw another way to make this amount.
a 		
b 		
c 		
d 		
e 		

MONEY WORD PROBLEMS

1 Andy buys a £5.95 sandwich and pays with a £50 note.

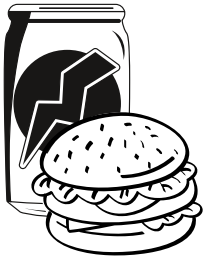


a What is his change? _____

b How could this change be made in notes and coins?

_____

2 Mandy buys a burger for £12.50 and a drink for £4.30.



a How much does her lunch cost? _____

b What notes and coins could she use to pay for her lunch with no change?

_____

3 Sandy buys a pizza using a £20 note and gets £1.15 change.

a How much did his pizza cost? _____

b How could his change be made in notes and coins?

_____

4 Candy buys a £9.60 salad and a £5.50 drink.
She gets £4.90 in change.

a What note did she use to pay for her lunch? _____

b If she paid the exact amount in notes and coins, what might it look like?

_____

5 Randy spends £13.75 on his lunch.
He buys a £7.10 pasta and a drink.

a How much did the drink cost? _____

b Show his change from a £20 note.

_____

FRACTION NUMBER LINES

1 Put these in order from smallest to largest.

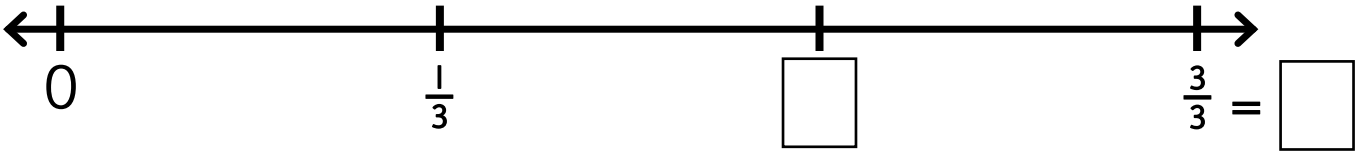
a $\frac{1}{5}, \frac{2}{5}, \frac{4}{5}, \frac{3}{5}, \frac{5}{5}$ _____

b $\frac{6}{6}, \frac{1}{6}, \frac{3}{6}, \frac{5}{6}, \frac{4}{6}, \frac{2}{6}$ _____

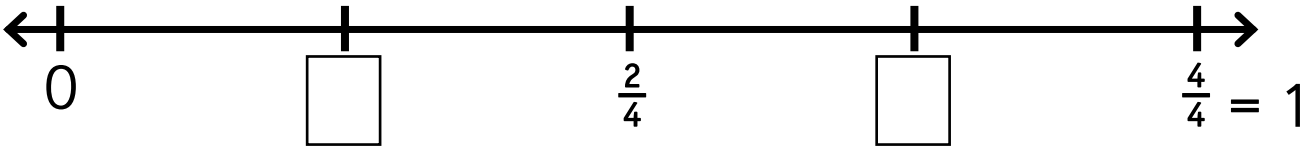
c $1, \frac{3}{8}, \frac{2}{8}, \frac{7}{8}, \frac{4}{8}, \frac{1}{8}, \frac{5}{8}, \frac{6}{8}$ _____

2 Fill in the fraction number lines.

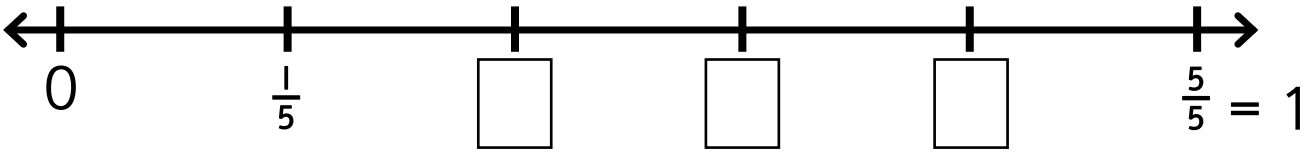
a



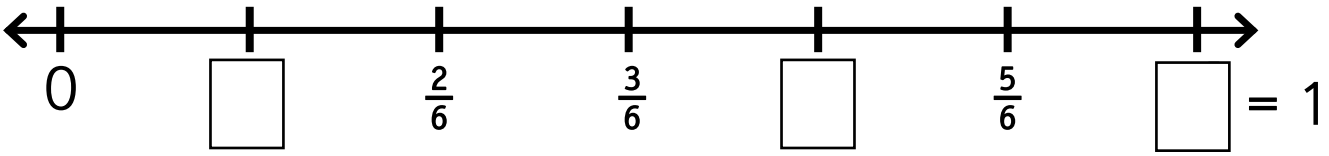
b



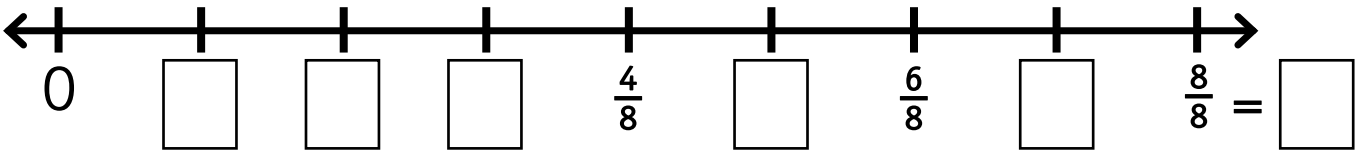
c



d



e



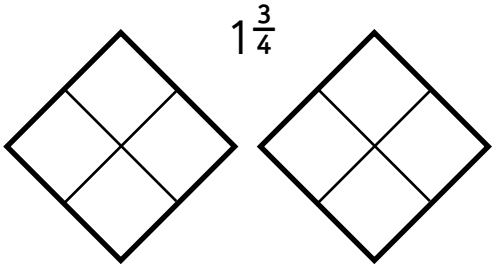
3 Put these in order from <u>smallest</u> to <u>largest</u>.

$\frac{1}{5}, \frac{1}{2}, \frac{1}{6}, \frac{1}{4}, \frac{1}{8}, \frac{1}{3}$ _____

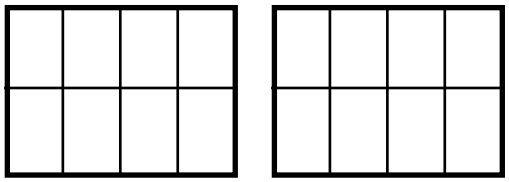
MIXED NUMBERS

1 Colour the fractions.

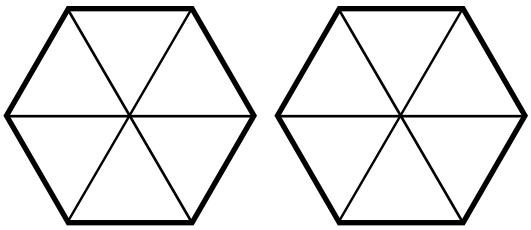
a $1\frac{3}{4}$



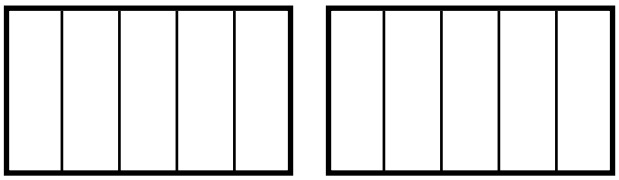
b $1\frac{3}{8}$



c $1\frac{5}{6}$

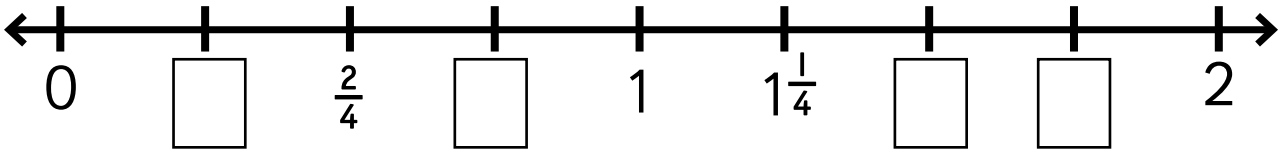


d $1\frac{3}{5}$

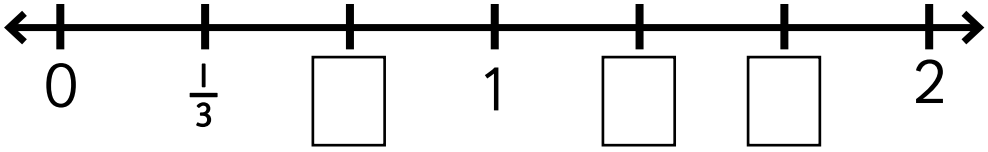


2 Fill in the fraction number lines.

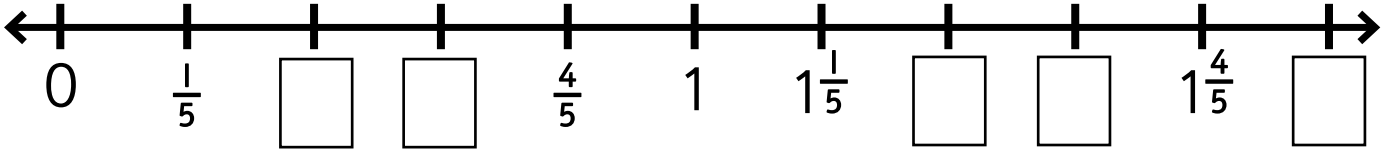
a



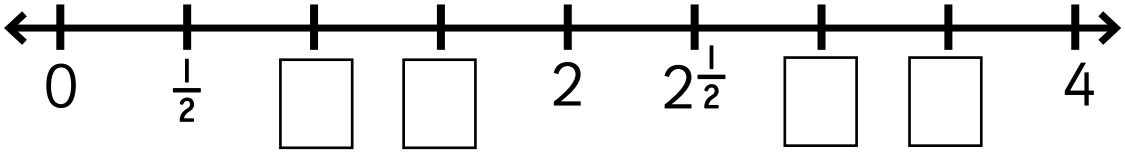
b



c



d



THINKING NUMBERS

1 **a** Pick 4 different numbers between 1 and 9 and make a 4-digit number.

☐☐☐☐

b Add 1 to the number.

☐☐☐☐

c Add 100 to the number.

☐☐☐☐

d Add 1000 to the number.

☐☐☐☐

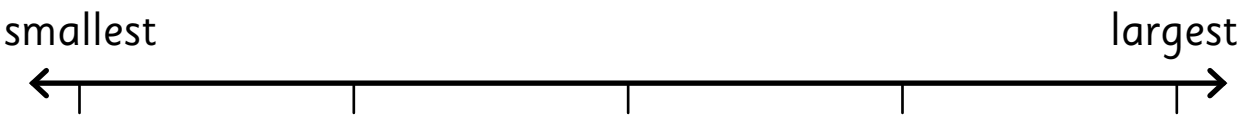
e Add 10 to the number.

☐☐☐☐

2 From the five numbers you made:

a Circle the largest number. **b** Highlight the smallest number.

c Put the numbers in order on this number line.



3 Add or subtract 10, 100, or 1000 from each number to make 5 more numbers. Put all ten numbers into order from smallest to largest.

_____

_____

4 What are the steps for ordering 4-digit numbers?

_____

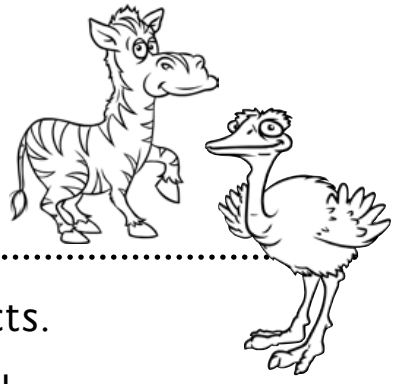
_____

_____

_____

HEADS AND LEGS

1 In Africa, Doc saw a herd of ostrich and zebra.
He counted 18 heads and 56 legs altogether.
How many of each animal were in the herd?



a Underline the question. **b** Circle the facts.

c Guess: how many ostriches and how many zebras.

d Check: does this add to 18 heads? Yes No

e Calculate the number of legs. An ostrich has 2 legs, a zebra has 4.

f Check: does this add to 56 legs? Yes No

2 Keep guessing until you find the correct answer.

How many of each animal were in the herd?

Ostriches = _____ Zebras = _____

3 Can you write your own heads and legs problem?
See if anyone in your family can find the answer.

DIZZY'S MONEY

1 Dizzy wants to buy a new pot for his cactus. The pot costs £18.50. How can he make the right amount in notes and coins?

a Underline the question. **b** Circle the facts.

c How can Dizzy make exactly £18.50 with notes and coins?

2 Dizzy has no £10 notes. Find another way to make £18.50.

3 Dizzy has no 50p coins. Find another way to make £18.50.

4 Dizzy ends up paying with a £20 note. Show his change.

5 Can you find the smallest number of notes and coins to make £18.50? How about the largest number of notes and coins?

HANDS-ON: DOLLHOUSE FURNITURE

Ruby is making furniture for her dollhouse living room. The room is 10 in long by 10 in wide. Ruby wants to know how much furniture she can fit into the living room.

1 Measure and draw up Ruby's dollhouse living room on a piece of paper. Draw on at least one door and a couple of windows.

2 What is the area of the room? _____ × _____ = _____

3 On another piece of paper, draw a sofa, bookcase, dining table, and 4 dining chairs as seen from above. Find the area of each item.

a Sofa _____ × _____ = _____

b Bookcase _____ × _____ = _____

c Table _____ × _____ = _____

d Chair _____ × _____ = _____ × 4 chairs = _____

4 What is the area of all the furniture? _____

5 Cut the furniture out and place them in the living room. Remember to think about windows, views, and doors opening.

6 How much area is left in the room? _____ – _____ = _____

7 What other furniture would you put in the room? Draw them, cut them out, and place them in the room. Remember to think about windows and doors.

8 How much area is left in the room now? _____