Compare and order any number up to one billion

1 Mo and Rosie each use 8 counters to make a number on a place value chart.

O	Tth	Hth
1 1	0.1 0.1	0.01
1	0.1 0.1	

Mo

O	Tth	Hth
1 1	0.1 0.1	
1 1	0.1	
1		

Rosie

Who has made the greatest number? _Rosie_

Explain how you know.

Her number has 5 ones and Mo's only has 3

2 Write < or > to compare the numbers.

a)

T	O	Tth
10	1 1	0.1 0.1
	1	0.1 0.1
		0.1

<

T	O	Tth
10	1 1	0.1
	1 1	
	1 1	

b)

O	Tth	Hth
	0.1 0.1	0.01 0.01
	0.1 0.1	
	0.1 0.1	

>

O	Tth	Hth
		0.01 0.01
		0.01 0.01
		0.01 0.01
		0.01 0.01

c) 1.43 ⟩ 1.34

d) 30.14 ⟨ 31.4

3 Ron is comparing numbers.
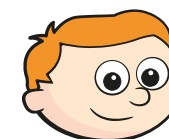
> 5.3 is less than 5.18 as 3 is less than 18

Is Ron correct? _No_

Explain your answer.

5.3 has 3 tenths and 5.18 only has 1 tenth and 8 hundredths.

4 a) Write these numbers on the place value chart.

10.02   20.2   0.21   10.1   2.01   0.12

Tens	Ones	Tenths	Hundredths
1	0	0	2
2	0	2	0
0	0	2	1
1	0	1	0
0	2	0	1
0	0	1	2

b) Write the numbers in ascending order.

_0.12, 0.21, 2.01, 10.02, 10.1, 20.2_

5 Write <, > or = to complete the statements.

a) 18.2 $\boxed{>}$ 18.09

b) 1.25 $\boxed{<}$ 12.5

c) 0.07 $\boxed{<}$ 0.7

d) 310.46 $\boxed{<}$ 3104.6

e) 0.5 $\boxed{=}$ five tenths

f) two ones and three hundredths $\boxed{<}$ three ones and two hundredths
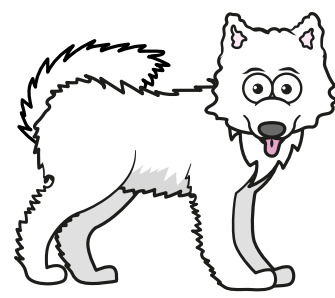
g) six tenths $\boxed{=}$ sixty hundredths

h) eight ones, nine tenths and one hundredth $\boxed{>}$ eight ones and nine hundredths
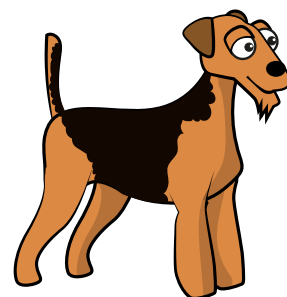
6 The weights of three dogs are shown.

20.37 kg   20.73 kg   20.7 kg

a) Write the weights in descending order.

20.73kg, 20.7kg, 20.37kg

b) A fourth dog is weighed.

This dog is the second heaviest of all the dogs.

What could the weight of this dog be?

E.g. 20.72 kg

Is there more than one answer?

7 Write the numbers in ascending order.

a) 4.5   45   0.45   0.504

0.45   0.504   4.5   45

b) 130.9 km   135 km   1,039.5 km   132.5 km

130.9km   132.5km   135km   1,039.5km

8 Circle all the values that are less than four-tenths.

(0.37)   0.45   8 tenths   1.1   (0.099)

9 Write the missing digits to make the statements correct.

a) 5.8 > 5.7̲8

b) 32̲.6̲ < 32.64

5.8 < 5.8̲8

32̲.7̲ > 32.64

How many answers can you find for each?

10 Fill in the missing digits so that the numbers are in ascending order.

0.97̲   0.9̲8   1.0̲   1̲.12̲   1.2̲2

How many answers can you find?

Various answers available.

Compare answers with a partner.