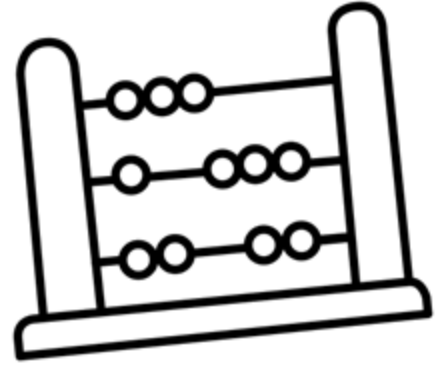


Explain how to compare amounts of money without converting



Maths

Unit: Money: Apply efficient strategies when calculating with money

Outcome

I can explain how to compare amounts of money without converting.



Keywords

compare

inequality symbols $<$ $>$

greater than / less than

ascending / descending



Keywords

You can **compare** to find out what is the same and what is different. For example, whether a value is greater or smaller than another.

An **inequality symbol** is used to show that one number or measurement is not equal to another. Two examples are $<$ (less than) and $>$ (greater than).

Greater than means a number is bigger than another number and **less than** means it is smaller.



Keywords

Ascending order is when items are arranged from smallest to largest.

Descending order is when items are arranged from largest to smallest.



Lesson outline

Explain how to compare amounts of money without converting



Comparing money using understanding of decimals



Ordering amounts of money



In this lesson you will meet:

Alex



Jun



Jun and Alex compare the amount of money they have.

Jun



Alex says he has a higher amount because he has more coins.

Alex



They organise their money to compare.

Jun



Alex



They compare the **greatest** coin value first.

Jun



Alex



Comparing money using understanding of decimals

Jun



I can see my set has more £1 coins. I don't even need to look at the 10 p coins to know that my set is worth more.

Alex



Comparing money using understanding of decimals

Jun



When comparing money, start by considering the largest coin value.

Alex



Comparing money using understanding of decimals

	£1	10p	1p
£	3	2	0
£	2	4	0

Jun



They can also compare
by writing down the
money they each have.

Alex



Comparing money using understanding of decimals

	£1	10p	1p
£	3	2	0
£	2	4	0

I have more money. There is a higher value in my £ column.



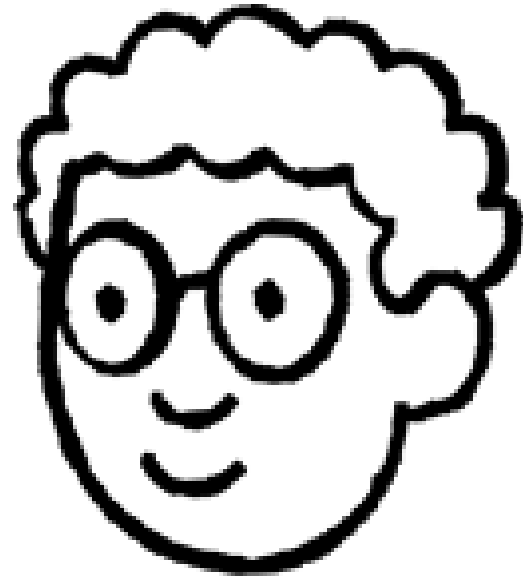
I have less money. There is a lower value in my £ column.



They can also compare by writing down the money they each have.



So comparing
money is just like
comparing
decimals!



You can also say that £3.20 is **greater than** £2.40 as it has a higher value.

You can use an **inequality symbol** to show the relationship.

$$£3.20 > £2.40$$

This is the **greater than inequality symbol**.



$$£3.20 > £2.40$$

£3.20 is **greater than** £2.40



You can also say that £2.40 is **less than** £3.20 as it has a lower value.
You can use an **inequality symbol** to show the relationship.

$$£2.40 < £3.20$$

This is the **less than inequality symbol**.



$$£2.40 < £3.20$$

£2.40 is less than £3.20



Jun and Alex **compare** how much money they have now.

Jun



Alex



Jun and Alex have the same amount of one pound coins. They both have £3.

To **compare**, they need to look at the next greatest value, which is 10 pences.



Comparing money using understanding of decimals

	£1		10p		1p
£	3	•	2		4
£	3	•	4		4

The value of the 10 pence column is different. Alex has a **greater** value in this column.



Comparing money using understanding of decimals

	£1		10p		1p
£	3	•	2		4
£	3	•	4		4

£3.24 < £3.44 £3.24 is **less than** £3.44

£3.44 > £3.24 £3.44 is **greater than** £3.24



What do you notice this time?

Jun



Jun and Alex have the same value of pounds.

They have the same value of ten pence pieces.

To **compare**, we can look at the value of the one pence pieces.

Alex



Comparing money using understanding of decimals

	£1		10p		1p
£	3	•	2		4
£	3	•	2		7

The value of the 1 pence column is different. Alex has a **greater** value in this column.



	£1		10p		1p
£	3	•	2		4
£	3	•	2		7

£3.24 < £3.27 £3.24 is **less than** £3.27

£3.27 > £3.24 £3.27 is **greater than** £3.24



We can also **compare** amounts when we want to buy something.

Jun wants to buy Alex a large birthday cake. Which cake costs more?



Comparing money using understanding of decimals

	£10	£1	10p	1p
£	1	3	7	6
£	1	2	3	8

Start with the column with the greatest value. Both prices have the same value in the £10 column.

They have a different value in the £1 column.



	£10	£1		10p	1p
£	1	3	•	7	6
£	1	2	•	3	8

£13.76 > £12.38 £13.76 is **greater than** £12.38

£12.38 < £13.76 £12.38 is **less than** £13.76



You can also **compare** money without using a place value chart.

Which is greater in value: £25.44 or £25.82?

Writing both amounts and aligning the digits can help you.

£25.44

£25.82



£25.44 < £25.82

£25.44 is **less than** £25.82

£25.82 > £25.44

£25.82 is **greater than** £25.44



True or false?

£3.08 > £3.40

T True

F False ✓

Justify your answer

a They both have the same amount of pounds. The next largest coin value is the ten pences. 4 is greater than 0



b $3 + 0 + 8 = 11$, but $3 + 4 + 0 = 7$, so £3.08 must be greater.



1) Use **inequality symbols** ($<$ and $>$) to **compare** these money amounts.

a)

b)

c)



2) Use **inequality symbols** ($<$ and $>$) to **compare** these money amounts.

a) £7.63 £6.48

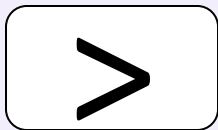
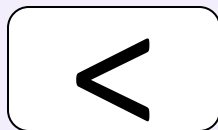
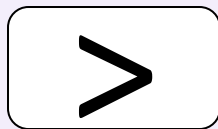
b) £7.63 £7.84

c) £7.63 £7.68

3) A new board game costs £27.56. Jun finds the same game for less than this price. It still has the same value of pounds. What could it cost? Can you say the biggest and smallest price?



1) Use inequality symbols ($<$ and $>$) to compare these money amounts.



2) Use **inequality symbols** ($<$ and $>$) to **compare** these money amounts.

a) £7.63 $>$ £6.48

b) £7.63 $<$ £7.84

c) £7.63 $<$ £7.68

3) A new board game costs £27.56 Jun finds the same game for less than this price. It still has the same value of pounds. What could it cost? Can you say the biggest and smallest price?

It could cost: £27.55, £27.00 or any value between.



Lesson outline

Explain how to compare amounts of money without converting



Comparing money using understanding of decimals



Ordering amounts of money



Ordering amounts of money

Class 5 have been raising money for charity.



Lucas has
raised
£10.84



Laura has
raised
£9.50

Andeep has
raised £10.76



Izzy has
raised
£10.89



Can we put their money amounts in **ascending** order?



Lucas has
raised
£10.84

Andeep has
raised £10.76



Laura has
raised
£9.50

Izzy has
raised
£10.89



Ordering amounts of money

We can first write each amount out into a place value chart.

£10	£1	10p	1p
1	0	8	4



Lucas has raised
£10.84



Ordering amounts of money

We can first write each amount out into a place value chart.

£10	£1	10p	1p
1	0	8	4
1	0	7	6

Andeep has
raised £10.76



We can first write each amount out into a place value chart.

£10	£1	10p	1p
1	0	8	4
1	0	7	6
0	9	5	0



Laura has raised
£9.50



We can first write each amount out into a place value chart.

£10	£1	10p	1p
1	0	8	4
1	0	7	6
0	9	5	0
1	0	8	9

Izzy has raised
£10.89



Ordering amounts of money

In **ascending** order, we need to find the lowest value first.

£10	£1	10p	1p
1	0	8	4
1	0	7	6
0	9	5	0
1	0	8	9

Lowest

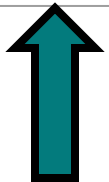
Greatest



Ordering amounts of money

Again, let's start by considering the column with the greatest value.

£10	£1	10p	1p
1	0	8	4
1	0	7	6
0	9	5	0
1	0	8	9



Ordering amounts of money

Laura's total is the only one less than £10.00, so it must be the lowest.

£10	£1	10p	1p
1	0	8	4
1	0	7	6
0	9	5	0
1	0	8	9

£9.50

Lowest

Greatest



Ordering amounts of money

Laura's total is the only one less than £10.00, so it must be the lowest.

£10	£1	10p	1p
1	0	8	4
1	0	7	6
~~0~~	~~9~~	~~5~~	~~0~~
1	0	8	9

£9.50

Lowest

Greatest



Ordering amounts of money

The others all have 1 in the in the £10 column, so we need to consider the next highest value column.

£10	£1	10p	1p
1	0	8	4
1	0	7	6
~~0~~	~~9~~	~~5~~	~~0~~
1	0	8	9

£9.50

Lowest

Greatest



Ordering amounts of money

The remaining totals all have the same value in the £1 column. We need to look at the next column.

£10	£1	10p	1p
1	0	8	4
1	0	7	6
~~0~~	~~9~~	~~5~~	~~0~~
1	0	8	9

£9.50

Lowest

Greatest



Ordering amounts of money

Andeep has got the lowest number of 10 pences, so his value is next when putting the totals in **ascending** order.

£10	£1	10p	1p
1	0	8	4
1	0	7	6
~~0~~	~~9~~	~~5~~	~~0~~
1	0	8	9

£9.50

£10.76

Lowest

Greatest



Ordering amounts of money

£10	£1	10p	1p
1	0	8	4
~~1~~	~~0~~	~~7~~	~~6~~
~~0~~	~~9~~	~~5~~	~~0~~
1	0	8	9

£9.50

£10.76

Lowest

Greatest



Ordering amounts of money

4 is lower than 9, so Lucas' total goes next.



£10	£1	10p	1p
~~1~~	~~0~~	~~8~~	~~4~~
~~1~~	~~0~~	~~7~~	~~6~~
~~0~~	~~9~~	~~5~~	~~0~~
1	0	8	9

£9.50

Lowest

£10.76

£10.84

Greatest



Ordering amounts of money

Izzy's total is greatest.

£10	£1	10p	1p
~~1~~	0	8	4
~~1~~	0	7	6
~~0~~	9	5	0
~~1~~	0	8	9

£9.50

Lowest

£10.76

£10.84

£10.89

Greatest



The amounts raised are in **ascending** order.

They begin with the lowest value and increase to the greatest value.

£9.50

Lowest

£10.76

£10.84

£10.89

Greatest

We can put these into **descending** order by going from highest to lowest.

£10.89

Greatest

£10.84

£10.76

£9.50

Lowest



Ordering amounts of money



Look at the table. Which amount of money comes next?

£10	£1	10p	1p
~~0~~	8	5	7
1	0	2	7
~~0~~	9	3	9
1	0	0	9

£8.57

Lowest

£9.39

£10.09

Greatest



Ordering amounts of money



True or false? The following money totals are in **ascending** order: £4.57, £14.83, £14.73, £22.80

T True

F False ✓

Justify your answer

- a** The third total has fewer 10 pences than the second, so they need to be swapped. ✓
- b** 4 is greater than 1, so the first total should be at the end.



- 1) Class 5 have been fundraising again. Use the table to order the values in **ascending** order.

£10	£1	10p	1p
1	2	0	5
1	1	4	3
1	1	1	9
1	0	8	6



2) Put the following money amounts in **ascending** order:

£0.83 91 p £2.83 £5 £2.73

3) Put the following money amounts in **descending** order:

64 p £9.01 £13 £9.10 £6.40 £6.04



Task B

Ordering amounts of money



- 1) Class 5 have been fundraising again. Use the table to order the values in **ascending** order.

£10	£1	10p	1p
1	2	0	5
1	1	4	3
1	1	1	9
1	0	8	6

£10.86

Lowest

£11.19

£11.43

£12.05

Greatest



2) Put the following money amounts in **ascending** order:

£0.83 91 p £2.73 £2.83 £5

3) Put the following money amounts in **descending** order:

£9.10 £9.01 £6.40 £6.04 64 p



Summary

Explain how to compare different amounts of money without converting

We can **compare** different amounts of money by starting with the most significant digit.

Inequality symbols can be used to **compare** different amounts of money.

$$£25.82 > £25.44$$



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