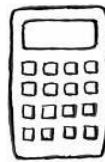


Name:

Teacher
Assessment



Section A Currency Conversions Grade D / C

- 1. Bill changes £27 into Swiss francs.
The exchange rate is £1 to 1.55 Swiss francs.

How many Swiss francs does he receive?

.....

.....

Answer Swiss francs
(Total 2 marks)

- 2. The table shows the exchange rates between different currencies.

£1 (pound) is worth 1.64 euros
\$1 (dollar) is worth 1.05 euros

- (a) Jane changes £400 into euros.
How many euros does she receive?

.....

.....

Answer euros
(2)

- (b) Sonia changes 672 euros into dollars.
How many dollars does she receive?

.....

.....

Answer dollars
(2)(Total 4 marks)

- 3. In the USA, a leather jacket costs \$96.
The exchange rate is \$1.60 to £1.

Find the cost of the jacket in £.

.....

.....

.....

Answer £
(Total 2 marks)

4. In France a supermarket bill is €77.
The exchange rate is €1.4 = £1.

Work out the cost of the bill in pounds.

.....
.....

Answer £
(Total 2 marks)

5. In France, Chris pays €18 for a meal.
The exchange rate is £1 = €1.60

What is the price of the meal in pounds?

.....
.....

Answer £
(Total 2 marks)

6. In the Czech Republic, Boris pays 922 korunas for a meal.
The exchange rate is 49.1 korunas to £1.

What is the cost of the meal in pounds?

.....
.....
.....

Answer £
(Total 2 marks)

7. A drink in Japan costs 374 yen.
The exchange rate is £1 = 189 yen.
What is the cost in pounds?

.....
.....

Answer £
(Total 2 marks)

8. Pauline goes on holiday.
She changes £200 into Euros (€)
The exchange rate is £1 = €1.7

(a) How many Euros does Pauline receive for £200?

.....
.....

Answer €

(2)

(b) Pauline spends one quarter of her Euros on presents.

How many Euros does she spend on presents?

.....
.....

Answer €

(2)

(c) A bag is priced at €68.
In a sale, this price is reduced by 25%.
Pauline buys the bag.

How much does she save?
Give your answer in pounds.

.....
.....
.....
.....

Answer £

(4)

(Total 8 marks)

9. Steff buys a pair of jeans in the USA.

The jeans cost \$24.99

The exchange rate is \$1.47 to £1.

How much do the jeans cost in £?

.....
.....
.....
.....

Answer £

(Total 2 marks)

10. The table shows some exchange rates.

£1 is worth 1.82
American dollars

£1 is worth 194
Japanese yen

Joanne buys a camera in America and pays 200 dollars.

Jack buys a similar camera in Japan and pays 20 370 yen.

In which country is the camera cheaper and by how much?

.....
.....
.....
.....
.....
.....

Answer Country

Amount

(Total 4 marks)

Success:

Target:

5. A cyclist records the distances she travels to the nearest mile.
One day her recorded distance is 28 miles.

Write down the least and greatest possible distance that she travelled.

.....
.....

Answer Least miles
 Greatest miles

(Total 2 marks)

6. Garry runs a distance of 15 km, correct to the nearest km.

- (a) Write down the minimum distance Garry could have run.

.....

Answerkm

(1)

- (b) Write down the maximum distance Garry could have run.

.....

Answerkm

(1)

(Total 2 marks)

7. The Kitti's hog-nosed bat from Thailand is the smallest known mammal.
One of these bats is 33 mm long to the nearest millimetre.
What is its smallest possible length?

Answer mm

(Total 1 mark)

8. (a) Alex weighs 43 kilograms to the nearest kilogram.

Write down her minimum weight.

.....

Answer kilograms

(1)

- (b) Alex's height is 130 centimetres to the nearest 10 centimetres.

Write down her minimum height.

.....

Answer centimetres

(1)

(Total 2 marks)

9. The scales at an airport weigh luggage to the nearest kilogram.
What are the greatest and least possible weights of a case showing 25 kg on the scale?

.....

Answer Greatest kg

Leastkg

(Total 2 marks)

10. It takes 20 minutes to develop a roll of film. This time is to the nearest minute.

What is the least and greatest time this could be?

Answer Least minutes

Greatest minutes

(Total 2 marks)

11. Mary says the length of a corridor is 35 m to the nearest metre.
Habib says the length of the same corridor is 30 m to the nearest 10 metres.
Mary and Habib are both correct.
Give a possible value for the actual length of the corridor.

.....
.....

Answer metres

(Total 2 marks)

12. There are 14 700 (to the nearest hundred) spectators at a football match.

(i) What is the least possible number of spectators?

Answer

(1)

(ii) What is the maximum number of spectators?

Answer

(1) (Total 2 marks)

13. Sophie spends £8 on a picture. This amount is given correct to the nearest pound.

Write down

(a) the maximum price which Sophie could have paid,

Answer £

(1)

(b) the minimum price which Sophie could have paid.

Answer £

(1)

(Total 2 marks)

14. Kirsty buys a bag that costs £25 to the nearest pound.

(a) Write the least amount that she could have paid.

.....

Answer £

(1)

(b) Write the greatest amount that she could have paid.

.....

Answer £

(1)(Total 2 marks)

15. This is a true statement.



Write down

(a) the minimum age that Kylie could be,

.....

Answer

(1)

(b) the maximum age that Kylie could be.

.....

Answer

(1)

(Total 2 marks)

Success:

Target:

4. A book weighs 3.2 kg, given to the nearest 100 g.

Find the minimum possible weight of 6 copies of the same book.

.....
.....

Answer kg
(Total 2 marks)

5. Mark's height is 203 cm and Eileen's height is 185 cm.
Both heights are given to the nearest cm.

Find the maximum possible difference between the two heights.

.....
.....
.....
.....

Answer cm
(Total 2 marks)

6. Bales of hay are 18 inches high correct to the nearest inch.
The bales are stacked six high on a lorry trailer.
The surface of the trailer is 36 inches above the ground correct to the nearest inch.

What is the lowest bridge that the trailer and bales will definitely fit under?
You **must** show your working.

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.....
.....
.....

Answer inches
(Total 4 marks)

7. Tim fits television aerials in houses.
He buys 100 metres of television cable.
Each house needs 10 metres of television cable.

The length of cable which Tim buys is correct to the nearest metre.
The length of cable needed for each house is correct to the nearest half metre.

After working on nine houses, what is the minimum length of cable which Tim could have left?
You **must** show your working.

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Answer metres
(Total 5 marks)

8. Emily drives her car a distance of 310 miles which is correct to 2 significant figures.
Her car uses 50 litres of petrol which is correct to the nearest litre.

Find, in miles per litre, the maximum value for the petrol consumption of her car.
You **must** show your working.

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.....

Answer miles per litre
(Total 4 marks)

9. John is telling a friend that he had a lorry load of top soil delivered for his garden.

He says that he had about 4 cubic metres delivered and that, with VAT, he paid about £80.

The volume is given to the nearest cubic metre.

The cost is given to the nearest £5.

Find the maximum price that John could have paid for one cubic metre of top soil.

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.....
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.....
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.....

Answer £

(Total 5 marks)

10. A boy runs 50 metres at a speed of 5 m/s.

Both values are measured to an accuracy of one significant figure.

What is the least possible time taken?

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.....
.....
.....
.....
.....
.....

Answer seconds

(Total 3 marks)

11. Simon bought audio items and gives their approximate costs.

Prices up to £15 are given to the nearest £1.
Prices over £15 are given to the nearest £5.

Simon bought

a CD player,
a CD costing £12
and headphones costing £20.

He says that he paid £150 in total. This total is given to the nearest £10.

Find the maximum possible price which Simon could have paid for the CD player.
You **must** show your working.

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.....

Answer £

(Total 5 marks)

12. A crane has a cable with a breaking strain of 5300 kg measured to 2 significant figures.
It is used to lift crates which weigh 100 kg measured to the nearest 10 kg.

What is the greatest number of crates that can be lifted at one time so that the cable does not break?

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.....
.....

Answer

(Total 4 marks)

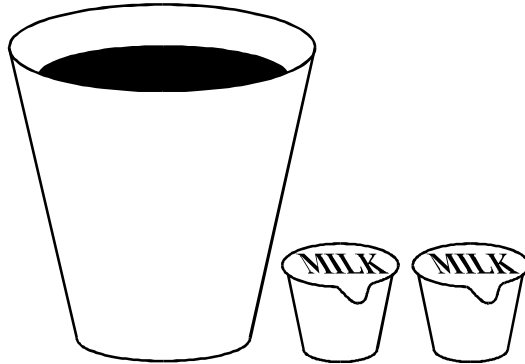
13. A coffee machine dispenses 130 millilitres of black coffee into cups with a capacity of 175 millilitres.

These values are accurate to 3 significant figures.

Milk is supplied in small cartons which contain 21 millilitres, accurate to the nearest millilitre.

Beryl likes milky coffee and always puts 2 cartons of milk in her coffee.

Will Beryl's cup ever overflow?



You **must** show all your working.

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(Total 4 marks)

14. A broadband internet connection has a download speed of 60 Kilobytes per second, which is accurate to 1 significant figure.
A video file is 15 000 Kilobytes, accurate to 2 significant figures.

Calculate the greatest possible time needed to download this file.

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Answer seconds
(Total 4 marks)

15. (a) Find the greatest possible value of $\frac{12.3(18.5 + 9.41)}{15.8}$

All the numbers are given correct to three significant figures.
Write down your full calculator display.

.....
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.....
.....
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.....
.....

Answer (3)

- (b) A trailer can safely carry weights up to 5200 kg, correct to two significant figures. It is loaded with boxes weighing 115 kg, correct to the nearest kilogram.

Calculate the greatest number of boxes that the trailer can carry safely.
You **must** show all your working.

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.....
.....
.....

Answer

(3)(Total 6 marks)

16. (a) The numbers in this calculation are given to 3 significant figures.

Find the least possible value of $\frac{12.3}{15.6 - 7.20}$ You **must** show all your working.

.....
.....
.....
.....
.....

Answer

(3)

- (b) The maximum safe load of a lift is 1500 kg, to the nearest 50 kg.
The lift is loaded with boxes weighing 141 kg and 150 kg, both weights given to the nearest kilogram.

Can the lift safely carry 3 boxes weighing 141 kg each and 7 boxes weighing 150 kg each? You **must** show all your working.

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(3)(Total 6 marks)

17. A lift cable can safely carry a total load 1200 kg.
The lift weighs 280 kg.
Both numbers are given to two significant figures.
The total load is made up of the weight of the lift and its contents.
The lift carries boxes weighing 65 kg each, correct to the nearest kg.

How many boxes can safely be carried?
You must show all your working.

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.....
.....
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.....
.....

Answer

(Total 4 marks)

18. A reservoir, in the shape of a cuboid, is 190 metres long and 80 metres wide.
On one day 3.7 inches of rain fell on the reservoir.

These measurements are all given correct to two significant figures.

What is the maximum possible volume of rain which could have fallen on the reservoir during that day?

Give your answer in cubic metres correct to **four** significant figures.

Use 2.54 centimetres to be exactly 1 inch.

The volume of a cuboid is length x width x depth.

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.....
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.....
.....

Answer cubic metres

(Total 6 marks)

19. A floodlight tower is marked with the following sign.

**WATTAGE NOT TO EXCEED
400 000 WATTS**

The spotlights on the tower are rated at 2500 watts each.
The manufacturer can only guarantee that the wattage of these spotlights is accurate to the nearest 100 watts.

(a) What is the maximum number of spotlights that can **safely** be put on the tower?

.....
.....
.....
.....
.....

Answer

(3)

(b) The formula $W = I^2 R$

connects W (watts), I (amps) and R (ohms).

For one of the spotlights, the value of I is 25 amps measured to 2 significant figures.

What is the minimum possible value of R ?

.....
.....
.....
.....
.....
.....

Answer ohms

(3)

(Total 6 marks)

Success:

Target:

2. The cost of a new house is made up of two parts.

Cost of land	£75 000
Building cost	£130 per square foot

A house has an area of 1700 square feet.
A builder buys the land and builds a house.
He sells it for £350 000.
How much profit is made by the builder?

.....

.....

.....

.....

.....

Answer £

(Total 4 marks)

3. This is part of Sari's electricity bill.

OHM Electricity Company	
Present reading	7466 units
Last reading	6942 units
Each unit costs 4.5p	

How much does she pay?

.....

.....

.....

.....

Answer £

(Total 4 marks)

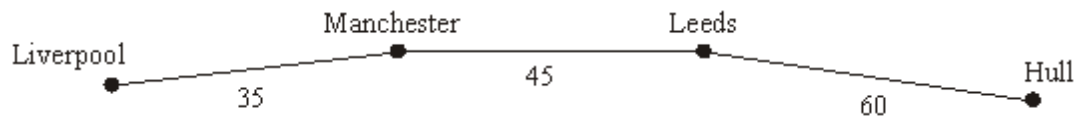
4. Sam has £1.65. Vicki has 75p
How much must Sam give Vicki so that they each end up with the same amount?

.....
.....
.....

Answerpence

(Total 3 marks)

5. Here is a route map of the M62 motorway.
The distances, in miles, between four cities are shown on the map.



Complete the following table to show the distances between these cities.

Liverpool			
35	Manchester		
80		Leeds	
		60	Hull

.....
.....
.....

(Total 3 marks)

6. Fred and Susie each choose a number.
Fred's number is three times bigger than Susie's number.
The difference between the numbers is 70.

What numbers did Fred and Susie choose?

.....

.....

.....

.....

.....

Answer Fred's number Susie's number

(Total 3 marks)

7. The following tiles fit into the grid below so that the column and row totals add up to the numbers shown.

5	4	2	1	9	6
1	2	4	5	8	7
3	8	4	2	3	6
5	1	7	6	2	1

The two shaded tiles have been fitted for you.

Fit the other four tiles into the grid.

				2	1	Total
				4	5	18
5	4					25
1	2					35
Total	11	13	19	17	23	19

(Total 3 marks)

8. Below is the calendar for the first two months of 2008.

January 2008							February 2008						
M	T	W	T	F	S	S	M	T	W	T	F	S	S
	1	2	3	4	5	6					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28	29		

Three friends Tom, Dick and Harry were all 16 this year.
 Tom had a birthday in February.
 Dick and Harry had birthdays in January.
 Dick is exactly 7 weeks older than Tom.
 Dick is 10 days younger than Harry.

When are their birthdays?

.....

.....

.....

Answer Tom

Dick

Harry

(Total 2 marks)

9. Barbara uses her car to work as a volunteer driver at her local hospital. She is paid 40 p for every mile she drives. On average she drives 2000 miles each month. Here is some information about the running costs of Barbara's car.

Fuel consumption	50 miles per gallon
Other running costs	10 pence per mile

- (a) Petrol costs £5 per gallon

Calculate Barbara's annual fuel bill.

.....
.....
.....

Answer £

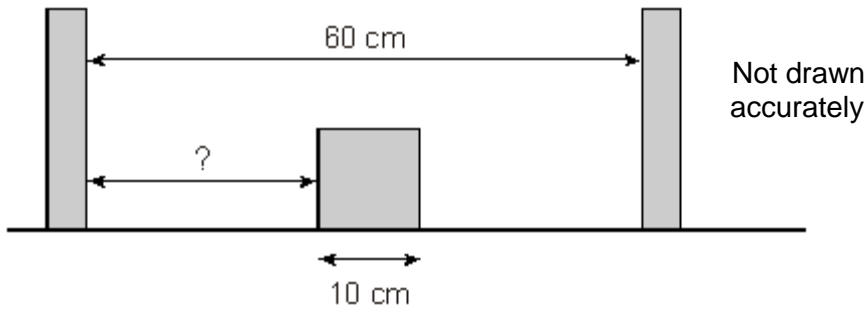
(2)

- (b) After paying for fuel and other running costs, Barbara saves the money left over. Barbara is planning to use this money for a holiday that will cost £3000. Will Barbara have enough money after saving for one year?

.....
.....
.....
.....
.....
.....

(4)(Total 6 marks)

10. Two posts are 60 centimetres apart.
A block, 10 cm wide, is placed exactly half way between them.



What is the distance between the block and one of the posts?

.....
.....

Answercm

(Total 2 marks)

11. In the following calculations each letter represents a different digit.
 $A \times A = BC$
 $BC \times BC = DEC$
 Which digit does each letter represent?

.....
.....
.....
.....
.....
.....

Answer A = B = C =
 D = E =

(Total 3 marks)

12. People in the country of Brownland have to pay income tax on the money they earn as shown.

Earnings (£)	Tax to pay
0 – 5000	NIL
Over 5000	20 % on all earnings over £5000

Examples	
Earnings (£)	Tax to pay
4000	NIL
13 000	20 % of £8000

Lynn earns £28 000.

Work out the amount of tax that Lynn pays.

.....

.....

.....

.....

.....

.....

Answer £

(Total 3 marks)

13. Matthew is investigating the costs of using a mobile phone.

He finds that there are two methods of paying for his phone calls.

Contract
£14 a month fixed charge
30 minutes of free calls then 10p per minute

Pay as you go
No fixed charge
No free minutes 40p per minute

Matthew expects to spend 150 minutes using a mobile phone each month.

Which method is cheaper, 'Contract' or 'Pay as you go'?
You **must** show your working.

.....

.....

.....

.....

.....

.....

Answer

(Total 4 marks)

14. Salima sees an advert for a summer holiday.



Summer Sun
Fantastic deals with Sunbreaks Holidays



Dates	7 nights	14 nights
1 April – 30 April	£315	£575
1 May – 6 July	£220	£400

Notes

- Prices are for one adult (16 years and over)
- Children (less than 16 years) 75% of adult price
- 10% discount if booked online (www.sunbreaks.co.uk)

Salima books a 7-night holiday in April for two adults.

The travel agent adds a percentage surcharge to the cost of the holiday for booking fees.

Salima's final bill is £642.60.

What was the percentage surcharge?

.....

.....

.....

.....

.....

.....

Answer %

(Total 3 marks)

15. Andy and Ben both have a collection of marbles.
If Andy gives Ben 15 marbles, they will have an equal number.
If Ben gives Andy 15 marbles, Andy will have four times as many as Ben.

How many marbles does Andy have? You **must** show your working.

.....
.....
.....
.....
.....
.....
.....

Answer

(Total 4 marks)


16. John has £2000 to invest.
He sees this advert.

Will John double his money in ten years
with SureFire Investments?
You **must** show your working.

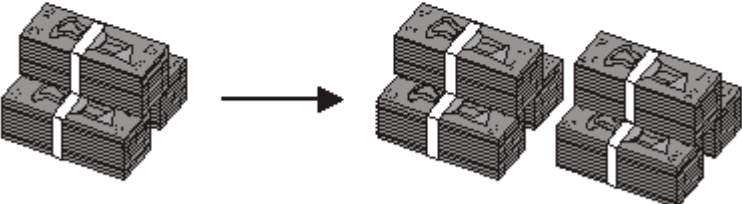
.....
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SureFire Investments

Don't see your money
go up in smoke!



Double your money in 10 years!



The average annual growth of our investment
account is **7.2%**

(Total 4 marks)

Success:

Target: