Cold Task- Fractions and Percentages of amounts

a) Find ½ of 550
b) Find 3/8 of 6400
c) Find 5/12 of 576
d) Calculate 10% of 950
e) Calculate 1% of 3000
f) Calculate 25% of 440
g) Calculate 47% of 6350

On the next page are the answers. Mark each section one at a time and follow the guidelines we have given you. They will tell you where you should be starting for this week's Maths learning.

Remember, we do not expect you to finish everything in the Maths pack. From the starting point you assess yourself at, you should aim to do 3 days worth of work (the work is set in order to build up your skills). The rest of the time can be used to develop Arithmetic skills and practising the skills we have set on IXL.

Cold Task Answers

a) Find ½ of 550

275

If you got this correct, mark the next 2 questions of the Cold Task. If you got this wrong, start on Page 1 Can I begin to calculate fractions of amounts? of the Maths document and work your way through over the course of the week.

b) Find 3/8 of 6400

2400

c) Find 5/12 of 576

240

If you got both of these correct, mark the next section of your Cold Task. If you got one, or both wrong, start on Page 3 of the Maths document Can I calculate fractions of amounts? and work your way through over the course of the week.

d) Calculate 10% of 950

95

e) Calculate 1% of 3000

30

f) Calculate 25% of 440

110

g) Calculate 47% of 6350

2984.5

If you didn't get them all correct, don't worry- start at Page 4 Can I begin to calculate percentages of amounts? and make your way through the rest over the course of the week.

If you did get all of these correct, start working from Page 6 of the Maths document Can I calculate percentage increase and decrease? If you got them all correct, and want to revise a little more before moving on, you can start from Page 5 Can I confidently, and accurately, calculate percentages of amounts?

Maths Pack Answers

Can I begin to calculate fractions of amounts?

Look at these trays of cakes. You buy a fraction of each tray or cakes. Work out how many cakes you buy. To find ½ divide by 2, to find ¼ divide by 4, to find 1/5 divide by 5.

a)

¼ of 16 = 4 ¾ of 16 = 12

b)

¼ of 8 = 2 ¾ of 8 = 6

c)

1/5 of 10 = 2 2/5 of 10= 4

d)

1/5 of 15 =3 4/5 of 15 = 12

e)

1/3 of 9 =3 2/3 of 9 = 6

f)

1/5 of 20 =4 3/5 of 20 = 12

Challenge

a) Find 2/5 of 25 = 10 b) Find ¾ of 44= 33 c) Find 2/4 of 16=8

Can I calculate fractions of amounts?

2700	24	630
	44	1266

Challenge

1000

2000

No. She is wrong because 1/5 is 120 divided by 5 = 24. 2/5 is therefore 24 x 2 = 48.

Yes because 3/5 of a large bag is only 180 which is not enough potatoes.

Can I begin to calculate percentages of amounts?

a) Find 10% of 700 = 14
b) Calculate 20% of 6800 = 70

c) What is 5% of 280? = 1360

d) Fill in the boxes using < > or =

50% of 48	<	25% of 100
10% of 300	=	20% of 150
40% of 50	>	80% of 20

Challenge

a) Calculate 35% of 200 = 70 b) Find 45% of 600 = 270

Can I calculate percentages of amounts?

a) Find 30% of 800 = 240
b) Calculate 5% of 2500 = 125
c) What is 35% of 280? = 98
d) Would you rather 65% of £400 or 45% of £500? = 65% of £400 because it is £260 which is bigger than 45% of £500 which is £225
e) Suzie has completed 95% of her 4000 word essay.
How many words has she written? 3800
How many words does she have left to write? 200

Challenge

a)Increase 340 by 25% = 425 b)Decrease 300 by 45% = 165

Can I calculate percentage increase and decrease?

a) Increase 1000 by 20% = 1200
b) Increase 65 by 40% = 91
c) Decrease 500 by 65% = 175
d) Decrease 3000 by 85% = 450
e) Increase 4500 by 3% = 4635

Challenge

a) How much does it cost for a child to go on holiday? £684.25

b) A family consisting of 2 adults and 3 children are interested in this package deal. How much will it cost them for a 1 week holiday?
£3662.75

Can I solve problems using my knowledge and understanding of finding fractions and percentages of amounts?

a) 12 is what fraction of 360 in its simplest form? **1/30**
b) What fraction of 900 is 500 in its simplest form? **5/9**
c) 30 is what percentage of 600? **5%**
d) The school kitchen needs to buy potatoes for lunch. A large bag has 200 potatoes and a medium bag has 3/5 of a large bag. The school cook says "I need 100 potatoes so I will have to buy a large bag." Is she right? Explain your reasoning. **No. A medium bag holds 3/5 of 200 which is 120. 120 is more potatoes than needed.**
e) One packet of biscuits weighs 300g. How much does 7/9 weigh to the nearest whole? **233 g**
f) Josie buys a packet of 'mix n match' crisps containing hoops, swirls and squares. If 2/5 of the packet is hoops and 20% are squares. What percentage are swirls? **40%**
If there are 500 crisps in a packet, how many of each type of crisp is there?
Hoops 200
Squares 100
Swirls 200

Can I further develop my problem solving skills using my knowledge and understanding of finding fractions and percentages of amounts?

Chocolate = 12.5%

Piggy bank = £9

Race = Billy = 2500m, Georgie = 1250m and Charlotte = 625m

Sam and Zach =

Sam = 60 divided by 3 to find ¼ of original amount

= ¼ = 20

= original amount is 60 + 20 = £80

Zach = £60 is 10% so full amount was £600

Answer = 600 – 80 = £520

Freya = 3.80 x 4 to find 1/5 of original amount

1/5 = 15.20

Pocket money = 15.20 + 3.80 = £19

Work out the missing numbers.

60

120

45

50% of ☐ = 30

25% of ☐ = 30

$\frac{2}{3}$ of ☐ = 30

25% of **P** = **Q**

$\frac{1}{5}$ of **Q** = **R**

10% of **R** = 7

Calculate **P** + **R**

R = 7 X 10 = 70

Q = 70 X 5 = 350

P = 350 X 4 = 1400

P + R = 1400 + 70 = 1470