## Q1.

Hassan has a jug with some water in it.
He adds another 140 millilitres of water.
Draw a line to show the new level of water.


Q2.
Here is a baby's drinking cup.


How many millilitres of water are in the cup?

1 mark

Q3.
Mr Khan makes a blackcurrant drink for a party.
He pours blackcurrant squash into a jug.


How much water must he add to make $\mathbf{5 0 0}$ millilitres of drink?


1 mark

Q4.
Jack pours some dark paint into a container.


In litres, how much paint is in the container?


Q5.


Measure accurately the length of the shortest side of this triangle. Write your answer in centimetres.


Q6.
Part of this number line is shaded.


Circle all the numbers below that belong in the shaded part of the number line.
1.1
1.4
$1 \frac{1}{3}$
$1 \frac{1}{5}$

Q7.

Here are two thermometers.
They show two different temperatures.


What is the difference between the two temperatures?


1 mark

Q8.
Joe places some apples on a weighing scale.
The pointer shows the mass of the apples.


He takes away one apple.
The mass goes down by 120 grams.
Draw the pointer in its new position on the scale below.


Q9.

This scale shows the mass of Amy's kitten when it was one month old.


This scale shows the mass of the kitten when it was two months old.


What is the increase in mass?


Q10.
Mine has two cartons of juice.
Each carton contains $\mathbf{2 2 0} \mathbf{~ m l}$.


She empties them both into this jug.
Draw an arrow $(\rightarrow)$ to show the level of the mixture in the jug.


## Q11.

Here is part of a number line.
Write the two missing numbers in the boxes.


Q12.
$\mathbf{A}$ and $\mathbf{B}$ are two numbers on the number line below.


The difference between $\mathbf{A}$ and $\mathbf{B}$ is 140
Write the values of $\mathbf{A}$ and $\mathbf{B}$.


Q13.
Two thermometers show the temperature inside and outside a greenhouse on a day in January.

Inside


Outside


How many degrees warmer was it inside the greenhouse than outside?

1 mark
Later the temperatures were

| inside | outside |
| :---: | :---: |
| $-1^{\circ} \mathrm{C}$ | $-8^{\circ} \mathrm{C}$ |

What is the difference between these two temperatures?


1 mark

Q14.
This scale shows the weight of Fred's cat.


What is the weight of Fred's cat?


1 mark
This scale shows the weight of Fred's dog


How much more does Fred's dog weigh than his cat?


1 mark

Q15.
Emily is making a cake.
She puts flour on the scales.
She then adds sugar to the flour.


How much sugar does she add?


Mark schemes

Q1.
Level of water indicated as shown:


Accept answers in the range 215 ml to 225 ml inclusive. Accept: alternative unambiguous indications of the correct level, provided the intention is clear, eg container shaded.

## Q2.

125

Q3.
360

Q4.
2.5 or $2 \frac{1}{2}$

Q5.
Answer is teacher's measurement +/- 2 mm .

$$
\text { Accept: } 5^{\frac{l}{2}} \mathrm{~cm}
$$

Q6.
Two numbers circled as shown:


Do not award the mark if additional incorrect numbers are circled.
Accept: alternative unambiguous indications, eg numbers

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ticked, crossed or underlined.
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Q7.
18
Accept-18

Q8.
Arrow drawn to 640, as shown:


Arrow should be closer to 640 than to 620 or 660
Accept any unambiguous indication of the correct point on the scale, including an arrow not originating from the centre of the dial.
Accept answer given on upper diagram provided no answer is given on lower diagram.

Q9.
325

Q10.
Arrow drawn between the marks for 425 ml and 450 ml exclusive.

## Q11.

(a) 955 in first box.
(b) 1010 in second box.

## Q12.

Award TWO marks for the correct answer as shown:
$A=-80$
$B=60$

If the answer is incorrect, award ONE mark for evidence of appropriate working, eg
$140 \div 7=20$

## Accept 'minus 80'

Do not accept '80-'
Answer need not be obtained for the award of ONE mark.
Accept for ONE mark:
$A=-80$ AND $B=$ wrong answer $\mathbf{O R}$
$A=-80$ AND $B=$ blank OR
$A=80$ AND $B=60$ OR
$A=80$ AND $B=-60$ OR
$A=60$ AND $B=-80$
Up to 2 (U1)

## Q13.

(a) 9
(b) 7

> Accept-7

Q14.
(a) 4.4
(b) 1.2

## OR

for finding the correct difference between 5.6 and the answer given for part (a)

## Q15.

Award TWO marks for the correct answer of 150
Accept 0.15 kg or equivalent.
If the answer is incorrect, award ONE mark for evidence of an appropriate method that involves reading both scales correctly AND identifies the correct operation needed, eg
$600-450=$
$450+50+50+50=600$
A final answer need not be written for the award of the method mark.

Up to 2

## Examples of responses

Craig has shown evidence that he has read both scales correctly and identified the correct operation to calculate the answer. Although he has not written a final answer, this is not required for the award of the mark. Craig can therefore be awarded the mark. Jane has also read the scales correctly but it is not clear from what she has written how she got to an answer of 250 . Since she has not identified the correct operation, Jane cannot be awarded the mark.


From her working, we can see that Emma has read both scales correctly. She has counted on in steps of 50 from 450 until she reached 600 . Since she has read both scales correctly and identified the correct operation to find the answer, her method is appropriate, even though the answer she recorded was incorrect. Emma can be awarded the mark. Adio has used a counting back method on a self-drawn number line, but there is no evidence in his working out that he has read both scales correctly. Adio's method is not correct. Therefore, he cannot be awarded the mark.


Although the answer to her calculation is incorrect, Jo has shown evidence that she has read the scales accurately and identified the correct operation. Jo's method is, therefore, correct and she can be awarded the mark. Nick has also shown evidence that he has read
the scales correctly, but has identified an incorrect operation by adding rather than subtracting the amounts on the two scales. Nick's method is not correct and he cannot be awarded the mark.

Jo


1 mark

Nick


