

Year 6 Homework - 29/11/17

Homework should take a maximum of $\frac{1}{2}$ hour per night excluding weekends. It is up to you whether you decide to do it all in one go or spread it over the week. Homework is important as it reinforces our class learning and prepares you for Secondary School life. Please try to complete as much as you can!

Science

To support our new topic of Electricity, I would like you to draw me a sketch of your house showing what the main uses of electricity are. Who in your house uses most electricity do you think and why? What uses of electricity could you live without?

Spellings

For the next half term, we have split into two groups to support the spelling needs in our class. For homework this week, please learn the list of words set for your individual group (both included) ready for a test next week. Also, try to use your words in sentences or a short paragraph to show that you understand the meaning.

Maths

In preparation for our assessment week next week, I would like you to complete this set of questions- do as many as you can in 40 minutes or so on your own without help. I have included the answers for you also to check how you have done.

Please try and complete this before Tuesday as this is when we will be doing our school assessment.

Reading

This half term I want you to continue to read as much as possible with a focus on non-fiction! When reading with parents etc. try to practise skimming and scanning to locate information. Look at new language and discuss the meaning. Below are the objectives that we are focussing on at present.

- *Identify the value of skimming and scanning a text*
- *Identify and discuss the difference between statements of fact and opinion*
- *Show awareness of more complex punctuation when reading*
- *Decode increasingly complex new words, reading formation aloud accurately*

3. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.

a) Use **long division** to find the answer to these calculations:

Show your working out.

i. $6055 \div 7$	ii. $9024 \div 16$

4 marks

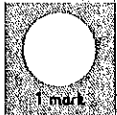
b) Find the answer to this calculation. Show the remainder as a fraction.

$693 \div 8 =$

1 mark

Total for this page

b) A teacher wants to cut lengths of string measuring 15cm from a ball of string. The ball measures 8m in total. How many complete lengths of 15cm will the teacher be able to cut?



5. Identify common factors, common multiples and prime numbers.

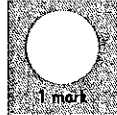
a) Put these numbers in the correct places in this sorting diagram:

2 3 4 5 6 7 8 9 10 11 12

	Is a factor of 20	Is not a factor of 20
Is a factor of 36		
Is not a factor of 36		

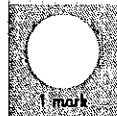


b) Identify the common factors of 9 and 15:



c) Circle all the numbers that are common multiples of 4 and 9:

36 70 65 47 72 99



d) What is the lowest common multiple of 3 and 7?



e) Write all the prime numbers between 40 and 60:



6. Use knowledge of the order of operations to carry out calculations involving the four operations.

a) Circle the correct answer for each calculation:

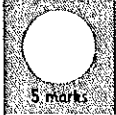
i. $23 - (14 + 5) =$ 4 14 24

ii. $5 \times (6 + 9) =$ 20 39 75

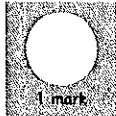
iii. $6 + 5 \times 3 =$ 21 25 33

iv. $(13 - 8) \times 7 =$ -43 35 43

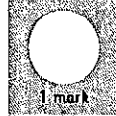
v. $36 \div (12 \div 3) =$ 1 3 9



b) $34 - (4 \times 7) =$

A large grid for working out the calculation. It consists of 20 columns and 10 rows. A larger, empty rectangular box is drawn in the bottom right corner of the grid, spanning approximately 8 columns and 4 rows.

c) $6 + 5^2 =$

A large grid for working out the calculation. It consists of 20 columns and 10 rows. A larger, empty rectangular box is drawn in the bottom right corner of the grid, spanning approximately 8 columns and 4 rows.

b) At a school there are 120 children in Key Stage 2. On one day 13 children go home for dinner and 8 children are absent. The remaining children have either a hot meal or sandwiches from home. Twice as many have a hot meal than have sandwiches. How many children have a hot meal?



2 marks

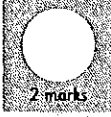
c) A small cinema records the number of people attending each film. Here are the details for a showing of the film Star Wars: The Force Awakens. 168 people came to the screening. Complete the table.

	Male	Female	Total
Adult	53		96
Child		25	



2 marks

d) Janek has £24 in his bank account, and £15 in cash. He intends to buy 2 games for £12.50 and £17. How much money will he have left after buying the games?



2 marks



Total for this page

e) A waiter and waitress are given tips during an evening at a restaurant. The waiter gets £38 and the waitress £45. They agree to share the tips.

How much will they each receive after sharing the tips?

2 marks

f) Yvette is going on holiday. Her baggage allowance on the aeroplane is 27kg for both hand luggage and hold luggage. She weighs her luggage. The hand luggage weighs 9.54 kg and the hold luggage 21.67kg.

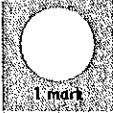
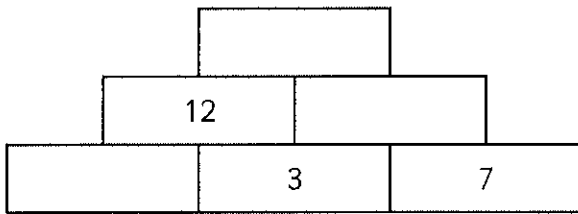
How much weight must she lose from her luggage to stay within the allowance?

1 mark

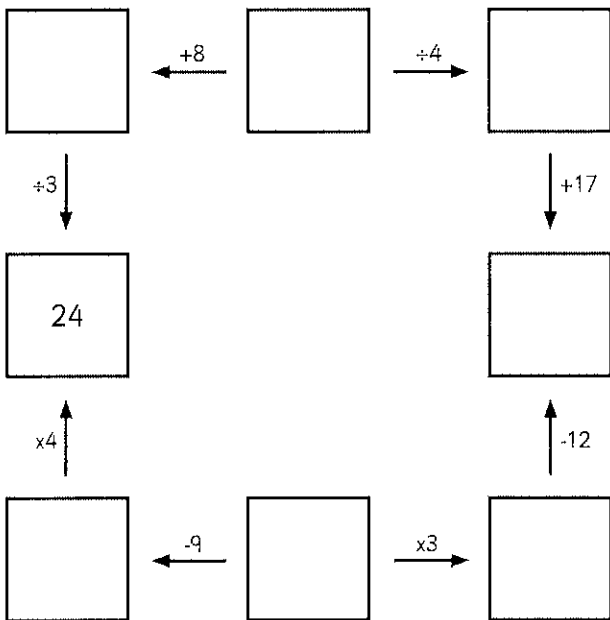
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8. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

a) In the following grid each number is the product of the 2 numbers beneath. Complete the grid.

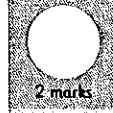


b) Complete this grid:



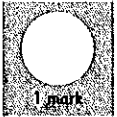
c) Jan starts with a number:

He adds 14 to the number, then multiplies the answer by 3.
 He subtracts six and divides the answer by five.
 He is left with 9. What number did Jan start with?



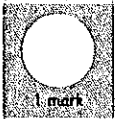
d) Use the symbols + and - to make this calculation correct:

$$19 \square 7 \square 13 \square 8 = 21$$



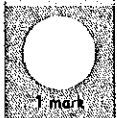
e) Circle 3 numbers that total 100.

46 37 28 47 16 26



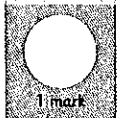
f) Write the missing digits to make this addition calculation correct.

$$\begin{array}{r} \square \quad 6 \quad 4 \quad \square \\ + \quad \square \quad \square \quad 4 \\ \hline 3 \quad 0 \quad 4 \quad 1 \end{array}$$



g) Write the missing digits to make this short division correct.

$$\begin{array}{r} \quad 4 \quad 8 \quad 9 \\ \square \overline{) 2 \quad \square \quad 3 \quad \square} \end{array}$$



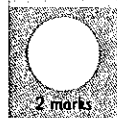
9. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

a) Circle the best estimate for this calculation and explain why you have made the choice.

$$27 \times 9 = \quad 220 \quad 250 \quad 280 \quad 300$$



b) A pack of wood costs £4.95. A builder buys 14 packs of wood. Estimate the cost of the wood.



c) Circle the most sensible estimate to this calculation:

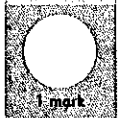
$$0.243 \times 16$$

2

8

4

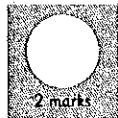
16



This table shows the 6 films with the highest takings in UK cinemas over the weekend 1st – 3rd January 2016.

Film	Weekend Takings
Daddy's Home	£2 908 358
Joy	£1 519 936
Snoopy And Charlie Brown: The Peanuts Movie	£1 296 199
Star Wars: The Force Awakens	£10 304 562
The Danish Girl	£1,376,191
The Good Dinosaur	£849,828

d) Estimate the total takings for these 6 films.



e) A family go to a café for lunch. Here are their selections from the menu:

3 sandwiches £2.95 each

2 bowls of soup £3.50 each

2 baguettes £3.75 each

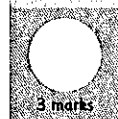
4 slices of cake £2.25 each

3 glasses of juice £1.95 each

1 cup of tea £2.40

1 cappuccino £2.60

Estimate the cost of their lunch.



Section B (Q2-8): Is for children to complete independently.

question	answer	marks	notes									
2. Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.												
a	846	2	2 marks for correct answer. 1 mark if only 1 arithmetical error									
b	22 977	2	2 marks for correct answer. 1 mark if only 1 arithmetical error									
3. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.												
a	i. 865 ii. 564	4	2 marks for each correct answer. 1 mark if only 1 arithmetical error.									
b	$86\frac{5}{8}$	1										
c	9125	3	3 marks for the correct answer. 2 or 1 marks available for correct method with 1 or 2 mistakes.									
4. Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.												
a	i. 75.2 ii. 47.75	4	2 marks for each correct answer. 1 mark if only 1 arithmetical error									
b	53 lengths	1										
5. Identify common factors, common multiples and prime numbers.												
	<table border="1"> <thead> <tr> <th></th> <th>Is a factor of 20</th> <th>Is not a factor of 20</th> </tr> </thead> <tbody> <tr> <th>Is a factor of 36</th> <td>2, 4</td> <td>3, 6, 9, 12</td> </tr> <tr> <th>Is not a factor of 36</th> <td>5, 10</td> <td>7, 8, 11</td> </tr> </tbody> </table>		Is a factor of 20	Is not a factor of 20	Is a factor of 36	2, 4	3, 6, 9, 12	Is not a factor of 36	5, 10	7, 8, 11	2	
	Is a factor of 20	Is not a factor of 20										
Is a factor of 36	2, 4	3, 6, 9, 12										
Is not a factor of 36	5, 10	7, 8, 11										
b	1, 3	1										
c	36 and 72	1										
d	21	1										
e	41, 43, 47, 53, 59	1										

question	answer	marks	notes												
6. Use their knowledge of the order of operations to carry out calculations involving the four operations.															
a	i. 4 ii. 75 iii. 21 iv. 35 v. 9	5	1 mark for each correct answer												
b	6	1													
c	31	1													
d	9	1													
7. Solve addition and subtraction multi-step problems in contexts, deciding which operations to use and why.															
a	£1.05 and 55p	2	2 marks for a correct answer. 1 mark for an incorrect answer using a correct method.												
b	66 children had hot dinners	2	2 marks for a correct answer. 1 mark for an incorrect answer using a correct method.												
c	<table border="1" data-bbox="296 1227 874 1406"> <thead> <tr> <th></th> <th>Male</th> <th>Female</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Adult</td> <td>53</td> <td>43</td> <td>96</td> </tr> <tr> <td>Child</td> <td>47</td> <td>25</td> <td>72</td> </tr> </tbody> </table>		Male	Female	Total	Adult	53	43	96	Child	47	25	72	2	2 marks for all 3 answers correct. 1 mark for 2 answers correct
	Male	Female	Total												
Adult	53	43	96												
Child	47	25	72												
d	£9.50	2	2 marks for a correct answer. 1 mark for an incorrect answer using a correct method.												
e	£41.50	2	2 marks for a correct answer. 1 mark for an incorrect answer using a correct method.												
f	4.21kg	1													

question	answer	marks	notes
8. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.			
a		1	
b		3	3 marks for all correct. 2 marks for 1 mistake. 1 mark for 2 mistakes.
c	3	2	2 marks for correct answer. 1 mark for correct method with only 1 mistake.
d	$19 + 7 - 13 + 8 = 21$	1	
e		1	
f		1	
g		1	
9. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.			
a	Give 2 marks for any reasonable explanation which does not calculate the answer (243). e.g. $27 \times 10 = 270$, so 27×9 will be about 20 less (250) or $30 \times 9 = 270$ but will be less so 250.	2	1 mark for a calculation representing an estimate e.g. $30 \times 9 = 270$, but no written explanation.

question	answer	marks	notes
b	£70	2	2 marks for £70, which is $14 \times £5$. 1 mark for writing $14 \times £5$ but incorrectly calculating the answer. No marks for calculating $14 \times £4.95$.
c	4	1	
d	£18 000 000	2	2 marks for an estimate in the region of £18 000 000
e	£43	3	3 marks for an estimate between £41 and £45 2 marks for an estimate between £39 and £41 or £45 and £47 and 1 mark for an estimate between £37 and £39 or £47 and £49. No marks for a calculation to get an exact answer (£43.20) Children may note down rounding / estimates of each item.
		Total 82	

Spelling Lists

Mr Wainwright's group

'ow' sound

howl	powder
scowl	clown
our	hour
flour	ground
mouse	mouth
shout	account
bouncing	thousand
trousers	

Mrs Whitehouse's Group

Silent letters

Foreign	guarantee	leisure
Muscle	neighbour	queue
Rhyme	rhythm	stomach
Twelfth	vehicle	yacht

Find the clause

Circle the main clauses in the sentences below.

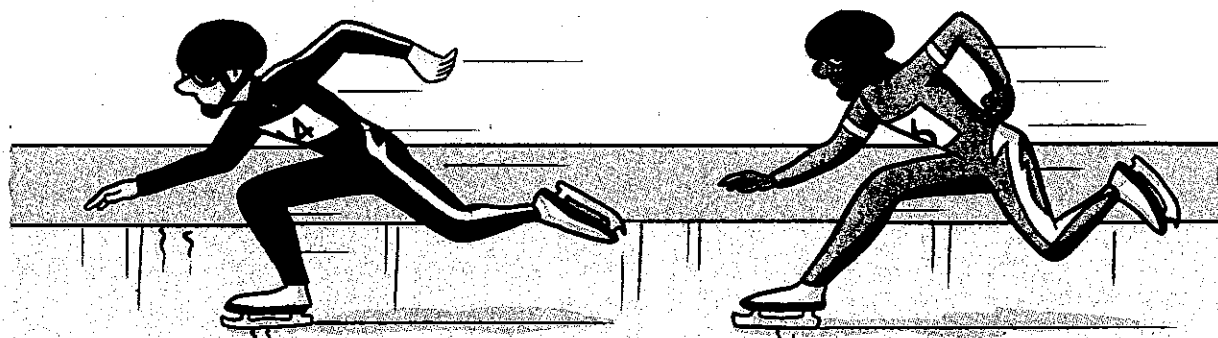
1. I like ice skating because I take part in competitions.
2. Tomorrow the weather will be good though it will rain on Tuesday.
3. Jim travels to work by bus even though he had a car.
4. Charlotte was born in France whereas her mother was born in England.

Circle the subordinate clauses in the sentences below.

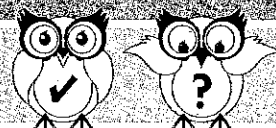
5. I am going to Glastonbury Festival this year although I can't go next year.
6. I am good at maths because I like numbers.
7. I am going to buy a new skirt before I get the bus home.

Circle the conjunctions that link the clauses in these sentences.

8. Jerry was sent home from school because he was unwell.
9. The umpire was usually good but he made some bad decisions today.
10. We went to the zoo where we saw some penguins.



How did you do?



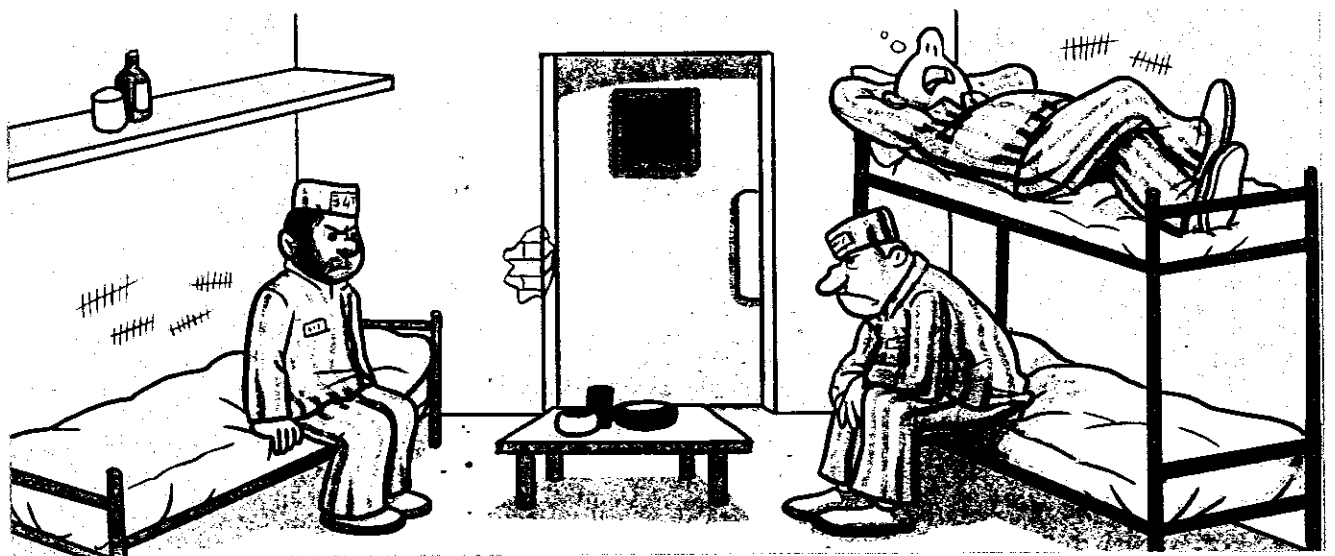
Add a clause

Extend the sentences by adding a relative clause.

1. Aneka hit the ball _____
2. Christopher approached the castle's gates _____
3. Sonia raced up the aircraft steps _____
4. Andrea tried on some new shoes _____
5. My parents were born in Jamaica _____

Extend the sentences by adding a subordinate clause.

6. The meal was served _____
7. Three prisoners were locked up _____
8. My broken radio was repaired _____
9. A new 100 metres world record was set _____
10. Alex was taken to dance lessons _____



How did you do?

