Name	
Form	
Teacher	

Maths Homework Booklet

Year 7 Summer 2

Set 1,2,3

Topic	Score achieved	Sparx %
1: Revision	/10	%
2: Revision	/10	%
3: Adding decimals	/34	%
4: Probability	/14	%
5: Probability	/8	%
6: Prime Factors	/47	%
7: Highest Common Factor	/35	%

Week 1

1 Work out $3 + 0.5 + 0.07 + 0.008$

2 Calculate 83×75

3 Simplify $8a - 3a - 3a - 2a$

4 If $y = 11x$ work out the value of y when $x = 9$

5 Round 935 correct to 1 significant figure

6 Solve $2x = 8$

7 Find the missing numbers $\_\_\_, 36, 30, 24, 18, \_\_\_$

8 Expand $6(8 - 3x)$

9 Complete : 5 litres = _____ ml

10 What is the 13 squared?

Sparx – Homework Answers

Week 2

1 Work out $300000 + 80 + 0.7 + 0.009$

2 Calculate 11×35

3 Simplify $3x - 2x - 2x$

4 If $y = 1x - 4$ work out the value of y when $x = 12$

5 Round 0.01126 correct to 1 significant figure

6 Solve $10x = 80$

7 Find the missing numbers $\_\_\_, 15, 13, \_\_\_, 9, 7$

8 Expand $12(5 - 8x)$

9 Complete : 6 kg = _____ g

10 What is the $12th$ square number?

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Week 3

Question 1: Work out the answers to the following additions

(a) 4.5 + 2.3 (b) 8.4 + 1.7 (c) 0.7 + 0.5 (d) 2.8 + 10.3

(e) 13.4 + 28.9 (f) 206.2 + 72.8 (g) 6.4 + 15.9 (h) 0.5 + 0.8 + 0.1

(i) 9.7 + 1.4 + 1.3 (j) 16.8 + 3.9 + 102.2 + 87.4

Question 2: Work out these additions

(a) 0.14 + 0.53 (b) 0.35 + 0.65 (c) 2.47 + 3.34 (d) 4.93 + 2.25

(e) 4.77 + 1.84 (f) 10.38 + 6.81 (g) 7.83 + 12.49 (h) 0.56 + 107.08

(i) 9.85 + 2.63 + 0.89 (j) 0.08 + 0.12 + 0.87 + 1.93 + 2.06

Question 3: Complete these additions

(a) 6.5 + 1.73 (b) 0.56 + 1.6 (c) 2.45 + 7.8 (d) 8.67 + 3.9

(e) 9.2 + 4.87 (f) 1.08 + 2.6 (g) 20.6 + 15.84 (h) 41.8 + 5.35

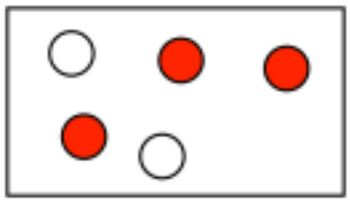
(i) 7.4 + 2.329 (j) 0.018 + 2.39 (k) 9.224 + 8.89 (l) 0.293 + 9.815

(i) 4.52 + 0.3 + 0.79 + 1.4 (j) 0.94 + 4.8 + 12.09 + 5.63

Sparx – Homework Answers

Week 4

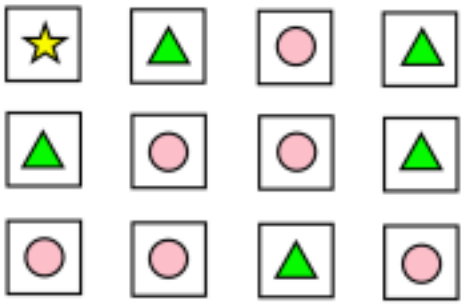
Question 1: Theo has 3 red sweets and 2 white sweets.
He picks a sweet at random.



(a) Write down the probability that Theo picks a red sweet.

(b) Write down the probability that Theo picks a white sweet.

Question 2: Leah has 12 cards, each with a shape on it.
She takes a card at random.



(a) What is the probability that Leah takes a card with a star on it?

(b) What is the probability that Leah takes a card with a triangle on it?

(c) What is the probability that Leah takes a card with a circle on it?

Question 3: Ralph has 9 cards, each with a number on it.

1	2	3	4	5	6	7	8	9

He picks a card at random.
Write down the probability that the chosen card is

(a) the number 8 (b) an even number (c) a number less than 7

(d) a multiple of 4 (e) a square number (f) a prime number

Question 4: There are 12 red roses, 5 yellow roses and 3 white roses in a vase.
Felix takes a rose, at random, from the vase.

(a) Write down the probability that he takes a white rose.
(b) Write down the probability that he takes a red **or** a white rose.
(c) Write down the probability that Felix takes a rose that is **not** red.

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Week 5

Question 1: Emily flips a coin twice.
One of the possible outcomes is a tail and a tail (TT)
List all the possible outcomes.

Question 2: Benjamin rolls an ordinary six-sided dice once and flips a coin.
List all the possible outcomes.


Question 3: A rugby team plays two matches.
They can win (W), draw (D) or lose (L) each match.
List all the possible outcomes.

Question 4: There are five students in a group: Alison, Beth, Conor, David and Eddie.
Miss Jenkins chooses two students at random from the group to give a presentation.
List all the possible outcomes.

Question 5: Here are four cards.
Each card has a number on it.

7	2	6	4

(a) Write down all the 2-digit numbers that can be made using the cards
(b) Write down all the 3-digit numbers that can be made using the cards

Question 6: Marco visits a restaurant with his friends.
Shown is the menu.
Marco chooses one starter, one main and one dessert.
List all possible outcomes.

Starter	Main	Dessert
Soup	Curry	Ice Cream
Fish	Pizza	Danish
	Burger	

Sparx – Homework Answers

Week 6

Question 1: Write each of these numbers as the product of their prime factors.

(a) 10 (b) 12 (c) 20 (d) 18 (e) 16 (f) 30 (g) 100

(h) 26 (i) 24 (j) 27 (k) 42 (l) 33 (m) 38 (n) 64

Question 2: Write each of these numbers as the product of their prime factors.
Give your answers in index form.

(a) 36 (b) 40 (c) 28 (d) 48 (e) 80 (f) 200 (g) 75

(h) 32 (i) 105 (j) 81 (k) 52 (l) 242 (m) 108 (n) 500

Question 3: Some numbers have been written as products of their prime factors.
Work out each number.

(a) 2×7 (b) $2 \times 3 \times 5$ (c) $2 \times 5 \times 11$ (d) $2 \times 2 \times 2 \times 3$

(e) $2^2 \times 5$ (f) 3×5^2 (g) $2^3 \times 3^2$ (h) $3^2 \times 11$

(i) 5^4 (j) $2^4 \times 5^2$ (k) $3^3 \times 13$ (l) 7×17^2

Question 4: Write each of these numbers as the product of their prime factors.

(a) 9000 (b) 235 (c) 392 (d) 715 (e) 444 (f) 792 (g) 5625

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Week 7

Question 1: (a) List all the factors of 10
(b) List all the factors of 15
(c) Write down all the common factors of 10 and 15.

Question 2: (a) List all the factors of 12
(b) List all the factors of 18
(c) Write down all the common factors of 12 and 18.

Question 3: Write down all the common factors of each of these pairs of numbers.

(a) 6 and 8 (b) 15 and 20 (c) 9 and 15 (d) 7 and 14

(e) 30 and 40 (f) 21 and 27 (g) 18 and 30 (h) 16 and 24

Question 4: (a) List all the factors of 14
(b) List all the factors of 21
(c) Find the highest common factor (HCF) of 14 and 21.

Question 5: (a) List all the factors of 24
(b) List all the factors of 36
(c) Find the highest common factor (HCF) of 24 and 36.

Question 6: Find the highest common factor (HCF) of each of these pairs of numbers.

(a) 4 and 14 (b) 6 and 9 (c) 9 and 21 (d) 8 and 12

(e) 6 and 15 (f) 10 and 17 (g) 30 and 45 (h) 40 and 60

(i) 28 and 63 (j) 24 and 36 (k) 16 and 28 (l) 18 and 45

(m) 150 and 200 (n) 12 and 54 (o) 90 and 270 (p) 39 and 65

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