



BROAD HORIZON
— T U I T I O N —

11+ Tuition

Year 3

Week 31

Answers

Name: _____

Date: _____

Starter Task – Quick Revision

Task 1 - spelling NOTE TO TEACHER

Read out these words to students and read each one twice.

1) naughty

2) particular

3) Although

4) Library

5) Believe

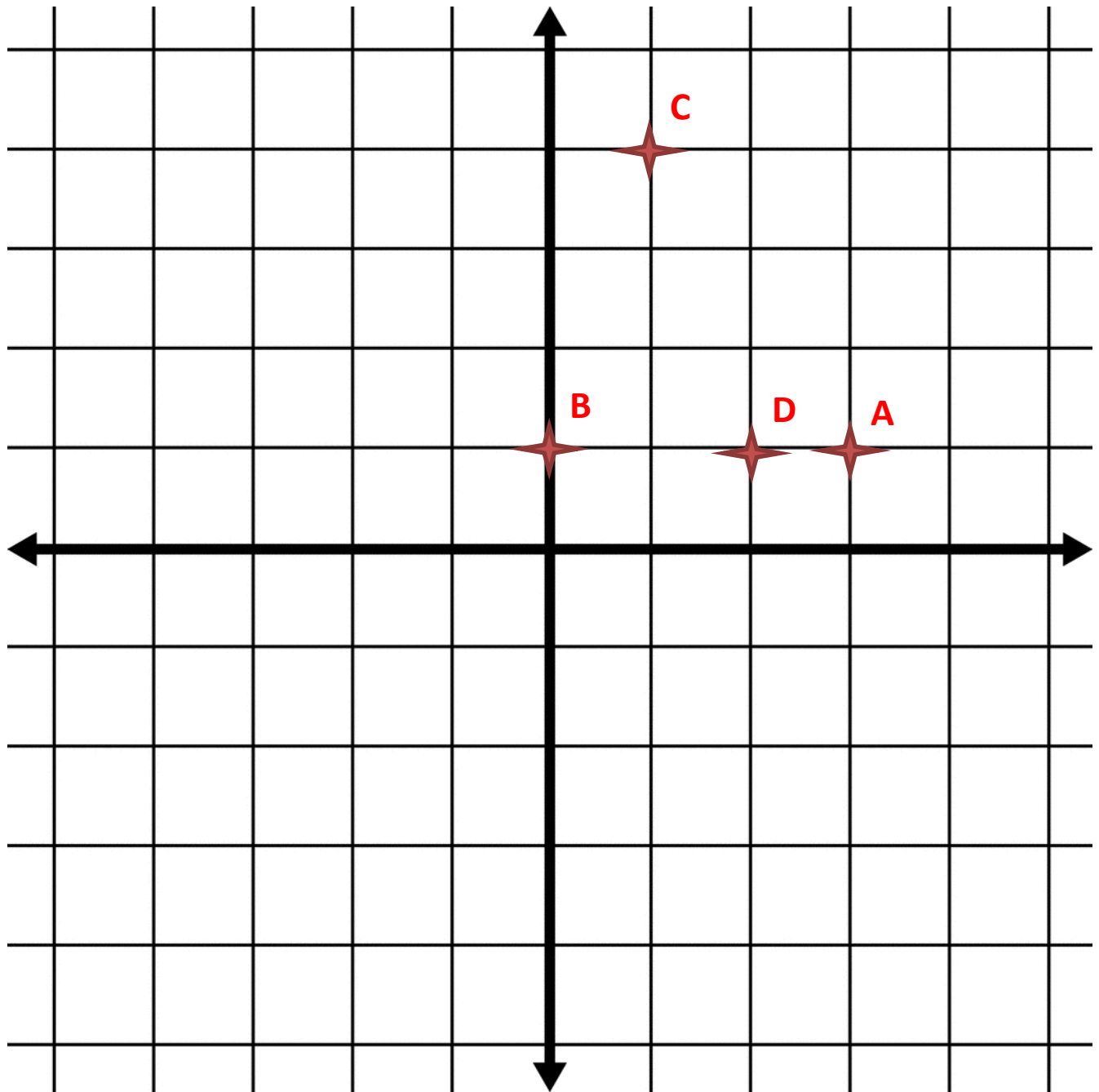
Task 2 – Definitions NOTE TO TEACHER

Read out the words and give time for students to define the first one before saying the next one

Material: the matter from which a thing is or can be made

Believe: Accept that (something) is true, especially without proof.

Task 3 – Maths



1) Mark a point labelled A at (3,1) .

2) Mark a point labelled B 3 squares West of A.

i) What are the co-ordinates of B ?

(0,1)

3) Mark a point Labelled C at (1,4)

4) Mark a point labelled D 3 squares South and one square East of C.

i) What are the co-ordinates of D?

(2,1)

5) Mahirul bought 3 boxes of chicken for £1 and 3 watermelons for £1.50. How much change does he get if he uses a £10 note?

£2.50

Task 4 - times tables

You will have 45 seconds to complete the table below from memory.

1) $9 \times 12 = 108$	2) $9 \times 8 = 72$	3) $9 \times 11 = 99$
4) $9 \times 7 = 63$	5) $3 \times 9 = 27$	6) $9 \times 9 = 81$
7) $10 \times 9 = 90$	8) $12 \times 10 = 120$	9) $10 \times 2 = 20$
10) $10 \times 10 = 100$	11) $10 \times 4 = 40$	12) $2 \times 10 = 20$
13) $9 \times 10 = 90$	14) $10 \times 10 = 100$	15) $9 \times 11 = 99$

Mental Arithmetic

Paper 11	Answer	Paper 12	Answer
1. 342 plus 100.	442	1. 417 plus 100.	517
2. 450 plus 100.	550	2. 260 plus 100.	360
3. 701 take 100.	601	3. 601 take 100.	501
4. 402 take 100.	302	4. 303 take 100.	203
5. 700 add 900.	1 600	5. 300 add 900.	1 200
6. 400 add 900.	1 300	6. 500 add 900.	1 400
7. 603 subtract 598.	5	7. 601 subtract 597.	4
8. 502 subtract 499.	3	8. 503 subtract 495.	8
9. 803 take away 799.	4	9. 804 take away 798.	6
1. 601 take away 594.	7	1. 602 take away 596.	6

Funky Function Machines

Use the function machines to work out the answer.

4		12
7		15
11		19
5		13
12		20

14		26
9		21
18		30
11		23
6		18

8		31
15		38
24		47
17		40
13		36

23		9
19		5
24		10
40		26
27		13

100		75
80		55
74		49
52		27
79		54

Funky Function Machines

Use the function machines to work out the answer.

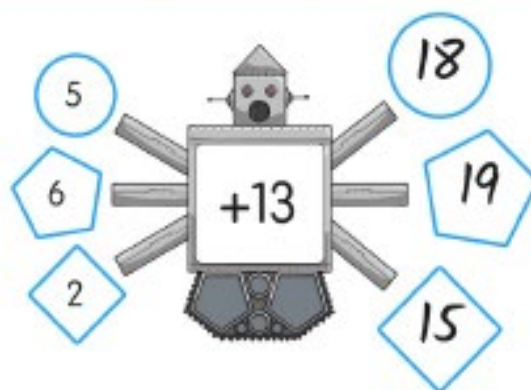
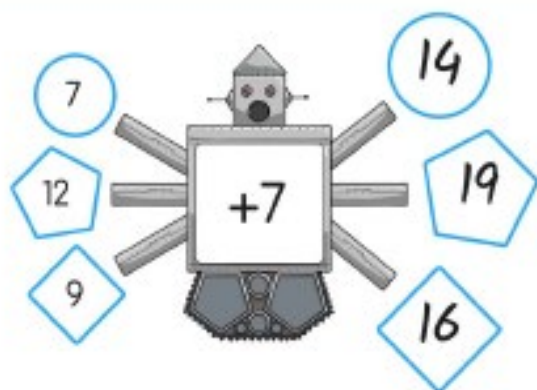
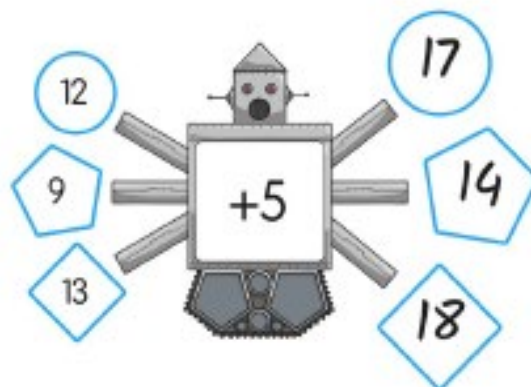
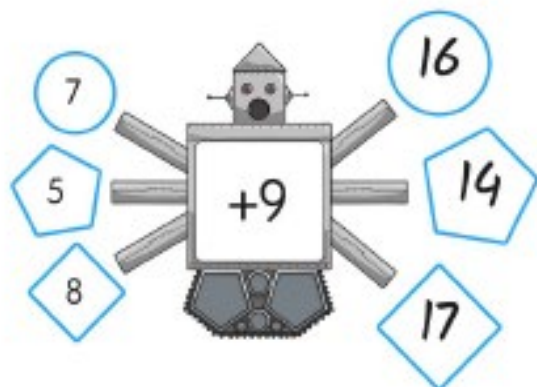
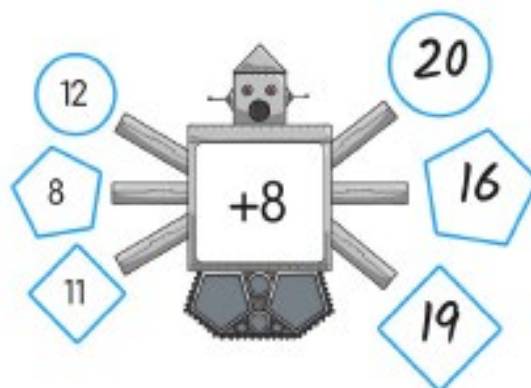
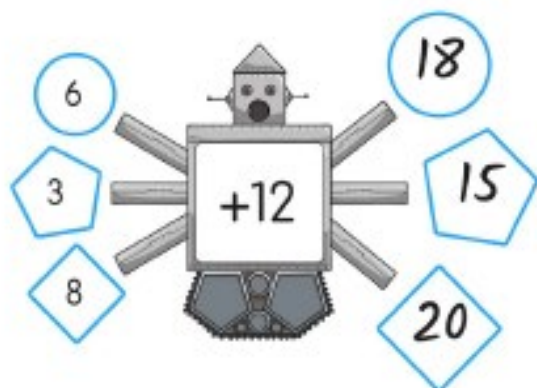
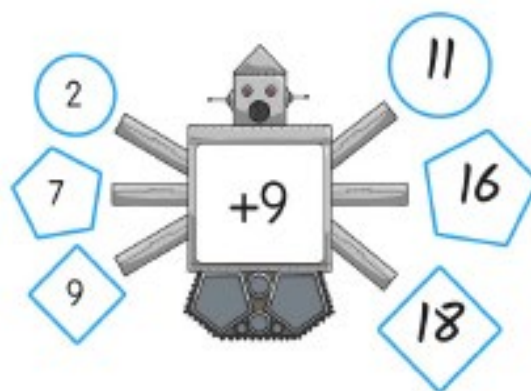
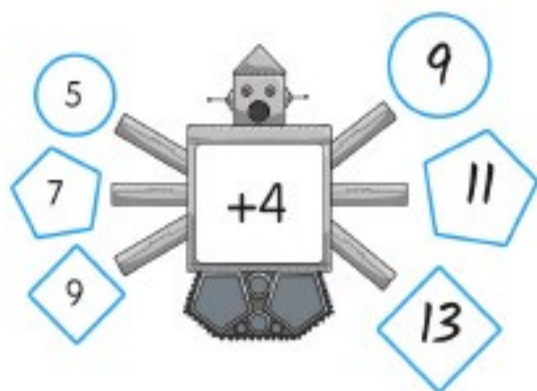
3		11
5		13
10		18
6		14
8		16

30		42
8		20
16		28
12		24
4		16

9		32
14		37
25		48
18		31
20		43

27		13
18		4
22		8
30		16
15		1

70		50
90		65
84		59
62		37
69		44



Two Step Function Machines Answers

1. 18
2. 26
3. 16
4. 40
5. 32
6. 5
7. 8
8. 25
9. 15
10. 12
11. 56
12. 68
13. 86
14. 80
15. 96
16. 35
17. 52
18. 57
19. 41
20. 76

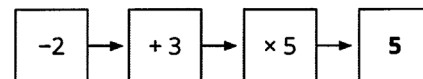
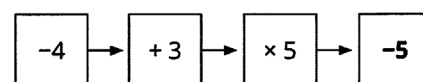
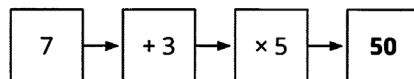
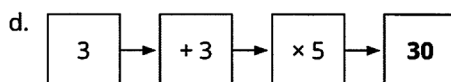
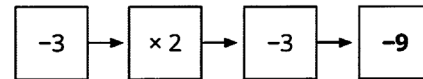
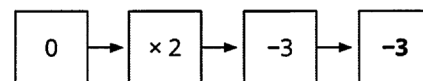
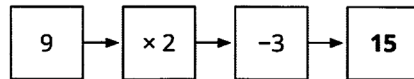
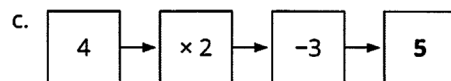
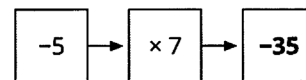
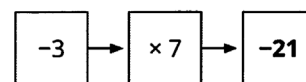
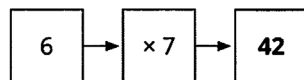
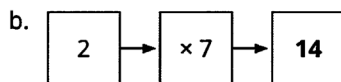
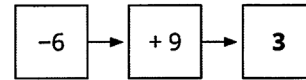
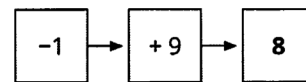
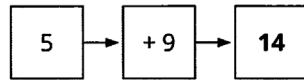
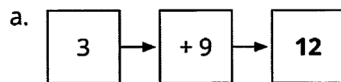


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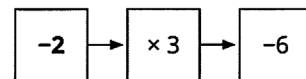
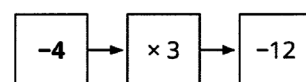
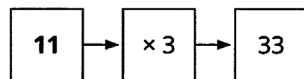
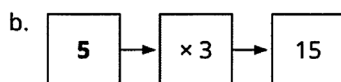
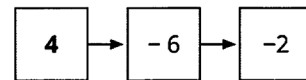
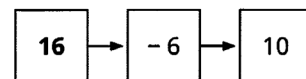
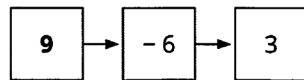
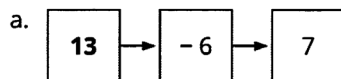


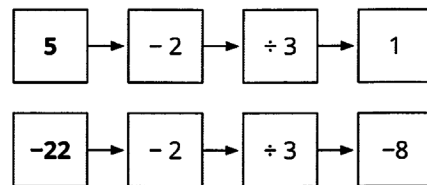
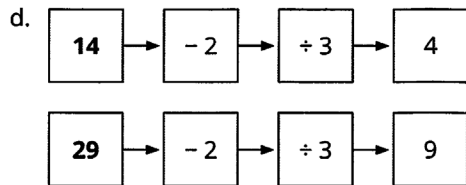
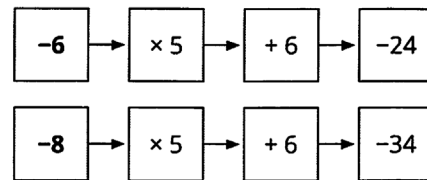
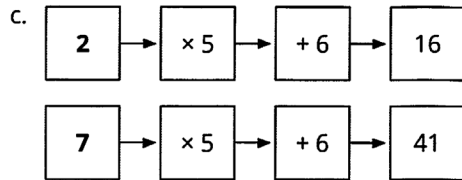
Number Machines Answers

1. Work out the outputs for the given inputs in these number machines:

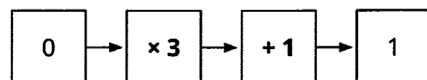
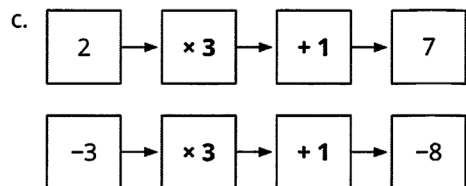
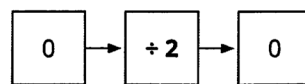
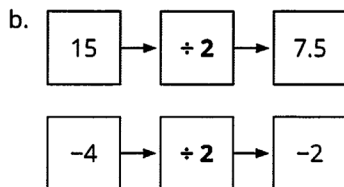
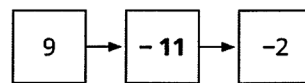
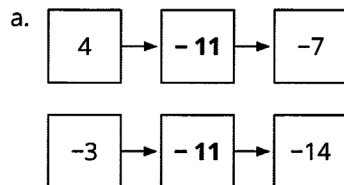


2. Work out the inputs for the given outputs in these number machines:

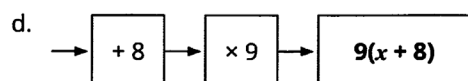
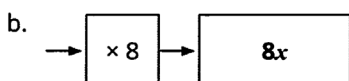
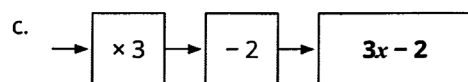
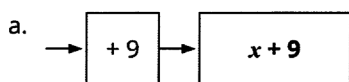




3. Can you find the number machines that correspond to these sets of inputs and outputs?



4. Find the output when the letter x is the input to these number machines.



Bronze ANSWERS

I can calculate the output of a function machine

$$1) 5 \Rightarrow \boxed{\times 4} \Rightarrow \boxed{+ 2} \Rightarrow 22$$

$$2) 4 \Rightarrow \boxed{\times 2} \Rightarrow \boxed{- 6} \Rightarrow 2$$

$$3) 7 \Rightarrow \boxed{\times 10} \Rightarrow \boxed{+ 4} \Rightarrow 74$$

$$4) 9 \Rightarrow \boxed{+ 3} \Rightarrow \boxed{\times 5} \Rightarrow 60$$

$$5) 8 \Rightarrow \boxed{- 6} \Rightarrow \boxed{\times 7} \Rightarrow 14$$

$$6) 12 \Rightarrow \boxed{\div 2} \Rightarrow \boxed{+ 9} \Rightarrow 17$$

$$7) 35 \Rightarrow \boxed{\div 5} \Rightarrow \boxed{- 4} \Rightarrow 3$$

$$8) 8 \Rightarrow \boxed{\times 5} \Rightarrow \boxed{\div 4} \Rightarrow 10$$

Silver ANSWERS

I can calculate the input of a function machine using inverse operations

$$1) 4 \Rightarrow \boxed{\times 3} \Rightarrow \boxed{+ 1} \Rightarrow 13$$

$$2) 7 \Rightarrow \boxed{\times 5} \Rightarrow \boxed{- 2} \Rightarrow 33$$

$$3) 2 \Rightarrow \boxed{\times 8} \Rightarrow \boxed{+ 5} \Rightarrow 21$$

$$4) 7 \Rightarrow \boxed{+ 4} \Rightarrow \boxed{\times 6} \Rightarrow 66$$

$$5) 10 \Rightarrow \boxed{- 3} \Rightarrow \boxed{\times 4} \Rightarrow 28$$

$$6) 20 \Rightarrow \boxed{\div 4} \Rightarrow \boxed{+ 8} \Rightarrow 13$$

$$7) 12 \Rightarrow \boxed{\div 2} \Rightarrow \boxed{- 11} \Rightarrow 13$$

$$8) 100 \Rightarrow \boxed{\times 10} \Rightarrow \boxed{\div 9} \Rightarrow 90$$

Gold ANSWERS

I can use a function machine to solve equations

$$1) 2x + 2 = 8 \quad \mathbf{x = 3}$$

$$2) 3y + 4 = 25 \quad \mathbf{y = 7}$$

$$3) 6b - 10 = 26 \quad \mathbf{b = 6}$$

$$4) 4t - 8 = 12 \quad \mathbf{t = 5}$$

$$5) 3(x + 1) = 9 \quad \mathbf{x = 2}$$

$$6) 5(y - 2) = 30 \quad \mathbf{y = 8}$$

$$7) 8(a + 4) = 56 \quad \mathbf{a = 3}$$

$$8) 3(c + 3) - 9 = 21 \quad \mathbf{c = 9}$$

English- Comprehension

The Lighthouse Keeper's Lunch

1. I think the basket with the cloth on is full of food because it says that Hamish is there to scare the seagulls 'away from the lunch'.

2. I think the basket is taking the lighthouse keeper's lunch to him because it says so in the title of the story. Also, the basket is being pulled along high over 'the wet blue sea' probably towards the lighthouse.

3. I think Hamish is feeling frightened and unwell. Due to the following reasons: The basket is swaying high over the sea and cats do not like water. It says 'flying did not agree with Hamish'. It says 'his fur stood on end when the basket swayed, his whiskers drooped when he peered down'. It says 'he felt much too sick'.

4. Before this scene I think the lighthouse keeper's lunch was pulled up to the lighthouse every day in a basket on a rope, but the food kept being eaten by seagulls. Therefore, the lighthouse keeper is now sending Hamish along in another basket to guard his lunch and stop the seagulls eating it.

5. Children's answers will vary. Example answer: I predict that Hamish the cat does not protect the lunch, so the lighthouse keeper has to think of another plan to stop the seagulls eating his lunch. I say that because Hamish is 'too sick even to notice the seagulls', so the plan won't work.

32 Sequencing stories p40

- 1** Possible answers:
 - a** By running across his paw.
 - b** He held the mouse by his tail.
 - c** Because the mouse said that he could help the lion.
 - d** The lion let him go.
- 2** Possible answers:
 - a** A huge net fell on him.
 - b** He heard the lion roaring.
 - c** He scurried off to find the lion.
 - d** 'Don't just stand there! Do something!'
- 3** Possible answers:
 - a** The mouse nibbled a hole in the net.
 - b** The lion got out of the net.
 - c** The lion put the mouse on his back and went off to the forest.
 - d** Yes.
 - e** Because the mouse saved the lion's life.
- 4** Answers will vary.
- 5** Answers will vary.
- 6** Answers will vary.

Correct the spelling mistake

Year 3 and 4 Correct the Spelling Mistake (4) Answers

The spelling mistakes in these sentences have been circled. Write the correct spelling for each circled word in the box.

1. Put the date on the **calindar** or you might forget.
2. We are going swimming in **cwarter** of an hour.
3. The professor has a lot of **knowlege** about the planets and the universe.
4. I **herd** you had won the Under-12s League yesterday.
5. The bowler **caurt** the ball.
6. The bag seemed to **apear** like magic!
7. Mum didn't **notiss** as I had sneaked upstairs.
8. The strongman lifted the heaviest **waght** with no trouble at all.

calendar
quarter
knowledge
heard
caught
appear
notice
weight

Each sentence below has one word that is incorrect. Write the correct spelling of the word in the box.

1. It was **achually** my turn next.
2. That milk had a **peckuliar** taste.
3. Queen Victoria's **raign** lasted 64 years.
4. The horse would not go **fourwards**, only backwards!
5. That **materyal** feels so soft and silky.
6. I asked Dad if he would **increese** my pocket money. He said, "No!"
7. The number **aight** is between seven and nine.
8. It was an **orddinary** day when suddenly the sky went black.

actually
peculiar
reign
forwards
material
increase
eight
ordinary



Section 5 — Odd One Out

1) C

All other figures have two white triangles at the top. (In C, the two white shapes are semicircles.)

2) B

All other figures have three white rectangles inside the largest rectangle. (B only has two white rectangles.)

3) E

In all other figures, the stripes on the huts alternate between white and another colour — either grey or black. (In E, all of the hut's stripes are white.)

4) A

In all other figures, the two small white shapes at the bottom are identical to each other so the butterfly is symmetrical. (In A, the bottom left-hand shape is different from the bottom right-hand shape so it isn't symmetrical.)

Section 6 — Find the Figure Like the First Three

1) C

All figures must have three arrows pointing outwards from the same place.

2) B

In all figures, the eyes and nose of the snowman must be black.

3) D

In all figures, the grey shape must be in front of the black shape.

4) B

All figures must have a large shape with four sides.

Times Table Practice

You will have 150 seconds to complete the table below from memory.

Times Tables Worksheet Answers

up to 12 x 12

Created by the Math Salamanders www.math-salamanders.com

1) $7 \times 11 = 77$

16) $7 \times 7 = 49$

31) $4 \times 6 = 24$

2) $2 \times 5 = 10$

17) $1 \times 3 = 3$

32) $4 \times 7 = 28$

3) $8 \times 11 = 88$

18) $7 \times 2 = 14$

33) $4 \times 3 = 12$

4) $7 \times 3 = 21$

19) $3 \times 5 = 15$

34) $7 \times 7 = 49$

5) $12 \times 2 = 24$

20) $2 \times 2 = 4$

35) $12 \times 7 = 84$

6) $3 \times 5 = 15$

21) $11 \times 11 = 121$

36) $5 \times 7 = 35$

7) $5 \times 12 = 60$

22) $8 \times 8 = 64$

37) $2 \times 8 = 16$

8) $12 \times 4 = 48$

23) $11 \times 7 = 77$

38) $10 \times 12 = 120$

9) $3 \times 4 = 12$

24) $9 \times 6 = 54$

39) $11 \times 5 = 55$

10) $3 \times 7 = 21$

25) $9 \times 12 = 108$

40) $3 \times 2 = 6$

11) $4 \times 10 = 40$

26) $12 \times 2 = 24$

41) $12 \times 1 = 12$

12) $11 \times 10 = 110$

27) $5 \times 5 = 25$

42) $6 \times 11 = 66$

13) $12 \times 9 = 108$

28) $10 \times 5 = 50$

43) $2 \times 10 = 20$

14) $6 \times 6 = 36$

29) $7 \times 9 = 63$

44) $1 \times 6 = 6$

15) $4 \times 11 = 44$

30) $6 \times 9 = 54$

45) $2 \times 11 = 22$

you

You will have 150 seconds to complete the table below from memory.

Times Tables Worksheet Answers

up to 12 x 12

Created by the Math Salamanders www.math-salamanders.com

1) **5** × 10 = 50

16) 3 × **6** = 18

31) 2 × **1** = 2

2) 10 × **3** = 30

17) 6 × **5** = 30

32) **6** × 2 = 12

3) **7** × 6 = 42

18) 8 × 10 = **80**

33) **6** × 1 = 6

4) 4 × 12 = **48**

19) 2 × 6 = **12**

34) 9 × **9** = 81

5) **3** × 1 = 3

20) 1 × 10 = **10**

35) 11 × **10** = 110

6) **3** × 9 = 27

21) 3 × **7** = 21

36) **4** × 7 = 28

7) 10 × 2 = **20**

22) 12 × **1** = 12

37) 9 × **11** = 99

8) **12** × 5 = 60

23) 9 × **2** = 18

38) 5 × **7** = 35

9) **7** × 11 = 77

24) 3 × **7** = 21

39) 3 × **11** = 33

10) 6 × 10 = **60**

25) **7** × 8 = 56

40) **9** × 4 = 36

11) **2** × 3 = 6

26) **9** × 2 = 18

41) **5** × 12 = 60

12) **5** × 12 = 60

27) 11 × **1** = 11

42) **1** × 1 = 1

13) 12 × **11** = 132

28) **4** × 6 = 24

43) 10 × 10 = **100**

14) 2 × 2 = **4**

29) **5** × 4 = 20

44) 12 × **1** = 12

15) 11 × 2 = **22**

30) **9** × 2 = 18

45) **3** × 3 = 9

If you've achieved below 40/45 revisit all your times tables before moving on to the next worksheet

You will have 150 seconds to complete the table below from memory.

Times Tables Worksheet Answers

up to 12 x 12

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1) **10** x 10 = 100

16) 3 x 11 = **33**

31) **9** x 2 = 18

2) **11** x 1 = 11

17) **10** x 7 = 70

32) **8** x 6 = 48

3) **9** x 6 = 54

18) **12** x 3 = 36

33) **10** x 10 = 100

4) **6** x 1 = 6

19) **4** x 9 = 36

34) 8 x **10** = 80

5) 7 x **3** = 21

20) **8** x 12 = 96

35) 4 x **2** = 8

6) 10 x 8 = **80**

21) **2** x 9 = 18

36) **6** x 12 = 72

7) **5** x 9 = 45

22) 8 x **6** = 48

37) **5** x 5 = 25

8) 11 x 4 = **44**

23) 11 x **12** = 132

38) 3 x **3** = 9

9) 5 x **9** = 45

24) **12** x 6 = 72

39) 3 x **9** = 27

10) 7 x **10** = 70

25) 7 x 10 = **70**

40) **7** x 3 = 21

11) 10 x **11** = 110

26) 2 x 10 = **20**

41) 4 x **4** = 16

12) **5** x 3 = 15

27) 2 x 6 = **12**

42) 10 x **1** = 10

13) 6 x **1** = 6

28) 11 x 9 = **99**

43) **2** x 5 = 10

14) 5 x **5** = 25

29) 3 x **0** = 0

44) 3 x 10 = **30**

15) 4 x **6** = 24

30) **6** x 8 = 48

45) 2 x **3** = 6

bles and