



BROAD HORIZON
— TUITION CENTRE —

11+ Tuition – Year 4

Week 4

Name: _____

Date: _____

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Starter Task – Quick Revision

1. Round 9736 to the nearest hundred =
2. Round 1.2778 to the nearest tenth =
3. Round 5.3257 to 3 decimal places =
4. Round 34,621 to the nearest thousand =

5)				
		7	2	4
x			3	9

6)				
6	2	9	1	6

7)				
8	5	5	7	6

- 8) $7 \div 1000 =$
- 9) $24 \times 1000 =$
- 10) $90.5 \div 1000 =$

10

Starter task – Vocabulary Homework Test



Exercise C

Select the most suitable word from the choice provided.

1. When it is cold my dog is quite to go for a walk.
a: courageous b: hospital c: reluctant

2. The evil king's was characterised by murder and suffering.
a: reign b: itinerary c: casual

3. The lazy pupil had a very approach to his homework.
a: casual b: maintain c: effective

4. The lifeguard dived into the rough sea to rescue the child.
a: initiate b: courageous c: alternative

5. My cousin is quite shy when meeting new people and often finds it difficult to the conversation.
a: current b: alternative c: initiate

6. The medicated spray is very against insect bites.
a: hospital b: effective c: courageous

7. The for the school trip includes visits to the museum and the art gallery.
a: itinerary b: maintain c: finally

8. The Queen of Britain is Elizabeth II.
a: casual b: courageous c: current

9. Mark was going to be late for his dinner but he had nobut to stay until the end of the meeting.
a: effective b: alternative c: reluctant

10. If Arsenal the pressure in the second half they will eventually win the match.
a: maintain b: casual c: itinerary

Maths

Paper 5	Answer	Paper 6	Answer
<p>1. Which of these numbers divide exactly by five: 12, 23, 45, 23, 60 ?</p> <p>2. Michael has 23 sweets. He shares them equally between four girls. How many does he have left over?</p> <p>3. Is two quarters the same as: One third One half or One fifth?</p> <p>4. What is one tenth of 60 ?</p> <p>5. What is one fifth of 25 ?</p> <p>6. There are five school days in one week. How many school days are there in eight weeks?</p> <p>7. How many pennies are there in one pound?</p> <p>8. How many pennies are there in six pounds?</p> <p>9. Add 27 and 52.</p> <p>10. What number do I need to add to 23 to get 32?</p>		<p>1. Which of these numbers divide exactly by four: 8, 32, 27, 39, 23 ?</p> <p>2. Simon has 34 dog biscuits. He shares them equally between five dogs. How many does he have left over?</p> <p>3. Which is biggest: One half One quarter or One third?</p> <p>4. What is one tenth of 80 ?</p> <p>5. What is one half of 19 ?</p> <p>6. There are six tins in a pack of cat food. How many tins are there in five packs?</p> <p>7. How many pennies are there in three pounds?</p> <p>8. How many pennies are there in eight pounds?</p> <p>9. Add 40 and 33.</p> <p>10. What number do I need to add to 38 to get 49?</p>	

BIDMAS – Order of Operations

BIDMAS is just a rule in maths which tell us which order we need to solve our sums in.

1 st	2 nd	3 rd	4 th	5 th	6 th
B	I	D	M	A	S
Brackets	Indices	÷	X	+	-

Explained Example	
$(2+3) - 2^2 + 5 \times 2$	In this sum we must solve the brackets first , keeping the rest of the sum the same. Each solved item will be colour coded.
$5 - 2^2 + 5 \times 2$	Now we solve the indices.
$5 - 4 + 5 \times 2$	Now we are left with subtraction, addition and multiplication. According to the rule, multiplication comes before addition and subtraction – so we solve that.
$5 - 4 + 10$	There is a special rule , when addition and subtraction come next to each other, you simply solve whichever comes first. So 5-4 is first.
$1 + 10 = 11$	So, the answer to that big scary sum is just 11!

Now if you go back and have a look, the big sum was just made up of small and easy sums which you can do! You just need to know which order to do them in.

Important rule: The special rule which we mentioned above in the explained example, this is also applied when multiplication and division appear next to each, you simply solve whichever one comes first. **Example.** $5 \times 10 \div 2 = 50 \div 2$ even though the rule says division should come first but not in the special rule.

Practice - BIDMAS – Order of Operations

Solve.

1) $4^3 + 15 \div 3$

Ans =

2) $7 \times 2^4 - 28$

Ans =

3) $6^2 - 92 \div 4$

Ans =

4) $2 \times 3^3 + 10$

Ans =

5) $5^2 \times 6 - 85$

Ans =

6) $64 \div 2^5 + 24$

Ans =

7) $70 \div 5 - 2^3$

Ans =

8) $4^2 + 7 \times 2$

Ans =

9) $2 \times 3^3 + 1$

Ans =

10) $7 + 80 \div 4^2$

Ans =

1) $4^2 - 2 \times 3$

Ans =

2) $11 + 2^4 \div 8$

Ans =

3) $5^2 \div 5 + 22$

Ans =

4) $3 \times 7^2 + 1$

Ans =

5) $3^3 + 2 \times 8$

Ans =

6) $96 \div 2^5 - 2$

Ans =

7) $10 \times 12 - 2^4$

Ans =

8) $8^2 + 16 \div 4$

Ans =

9) $3^3 \div 9 + 2$

Ans =

10) $10 \times 5^2 - 172$

Ans =

Further Practice - BIDMAS – Order of Operations

1) $5^2 + 26 \div 2 - 67$

Ans =

2) $16 \times 2^3 - 19 + 3^2$

Ans =

3) $19 - 10 \div 5 + 6^2 \times 2$

Ans =

4) $4^2 \times 3 - 2^4 + 21 \div 7$

Ans =

5) $8^2 + 1 \times 5 - 45$

Ans =

6) $24 \div 3 + 5^3 - 13^2$

Ans =

7) $48 \div 12 - 4^3 + 3$

Ans =

8) $9^2 + 2 \times 3 \div 6 - 49$

Ans =

9) $3 \times 2^5 + 15 - 12^2$

Ans =

10) $8 + 88 \div 11 - 4^3 + 2$

Ans =

1) $(7^3 + 4) - 14 \times 6$

Ans =

2) $(44 \div 11)^4 - 78$

Ans =

3) $12^2 \div (3 \times 4) - 41$

Ans =

4) $125 \div (17 - 12)^2$

Ans =

5) $(2^5 + 57) - 32 \div 4$

Ans =

6) $4^4 - (18 \div 9)$

Ans =

7) $(4 \times 5^2) + 16$

Ans =

8) $96 \div 2^3 - (4 \times 15)$

Ans =

9) $3^3 + (11 \times 7) - 43$

Ans =

10) $(29 + 35) \div 2^2$

Ans =

1) $(83 - 38) \div 3^2$

Ans =

2) $(36 \div 9)^3 - 87$

Ans =

3) $(7^2 + 41) \div 3 - 94$

Ans =

4) $(14 \times 5) + 2^5$

Ans =

5) $3^2 + (26 - 9) \times 2$

Ans =

6) $7 + 66 \div (2^4 - 5)$

Ans =

7) $(64 + 24) \div 2^3$

Ans =

8) $(55 - 45)^2 \div 4$

Ans =

9) $14 + 75 - (31 \times 3^2)$

Ans =

10) $3^3 + 77 \div (27 - 16)$

Ans =

Challenge - BIDMAS – Order of Operations

1) $28 \div 7 \times (6 + 7) - (19 + 25)$

Ans =

2) $15 + 2 \times (16 \div 4) + 5 \times 2$

Ans =

3) $36 \div 3 + (10 \times 3) - 18$

Ans =

4) $76 \div (23 - 21) \times 2 + 9$

Ans =

5) $16 + (24 - 4) \times 3 + 19$

Ans =

6) $58 \div 2 + (2 \times 7) + 15 - 42$

Ans =

7) $9 \times 48 \div (3 + 5) - 13$

Ans =

8) $(94 - 16) \div 3 + 2 \times 6$

Ans =

9) $64 \div (16 \times 4) + 12 - (7 + 5)$

Ans =

10) $7 \times (2 + 4) - 63 - 24$

Ans =

1) $90 \div (2 \times 5) + 13 - 34$

Ans =

2) $5 \times (7 + 11) - 56 \div (2 \times 4)$

Ans =

3) $(39 - 13) \div 2 \times 5 - 45$

Ans =

4) $28 \div (4 + 10) \times (4 + 24) \div 2$

Ans =

5) $(21 \div 3) + 27 - (8 \times 5) + 75$

Ans =

6) $39 + (74 - 63) \times 4 + 16$

Ans =

7) $(12 + 8) \times 3 \div 4 + 15$

Ans =

8) $3 \times (16 \div 2) + 16 \times 5$

Ans =

9) $11 \times 5 - (72 + 18) \div 5$

Ans =

10) $(64 \div 8) + 7 \times 8 + (40 - 38)$

Ans =

English - Grammar

Comparative and Superlative Adjectives

When making comparisons between people or things, a comparative or superlative adjective is required.

A superlative is the highest form of a certain quality. **Example:** Tallest is the highest form of tallness, you cannot be *taller* than the **tallest**.

A **comparative adjective** is simply used to compare two people or things.

In the examples below, **taller** is the comparative form of **tall** and **tallest** is the superlative.

Rory is tall.

Rory is taller than his brother.

Rory is the tallest boy in his class.

Good and Bad as Adjectives

The adjectives good and bad do not follow the normal rules for comparative and superlative verb forms.

good

better

best

bad

worse

worst

Can you think of any others?

Write the comparative and superlative adjectives for them.

Adjective	Superlative form	Comparative form
1)		
2)		
3)		

English - Comprehension

Inference

What Is It?

Inference is a skill we use when reading to help us understand a text further. Being able to infer means we can come to a decision or conclusion about the text.

How Do We Use It?

- We support our answers with clues from the text.
- We use our prior knowledge.
- We understand that there could be more than one answer.

Question 1

Read the following passage and answer the questions that follow.

The family waited patiently at the light. Beep, beep! A loud noise came from up the road. It startled the children, who had been waiting patiently at their routine road crossing. The journey to school was not far but it criss-crossed a few roads. Dad just turned his children's attention to the piece of blue sky, fighting its way against the grey. "Could be a bright day today," he reported.

a. What do you think the recent weather has been like where the children live?

b. How do you think the children are getting to school?

c. What is the meaning of 'a bright day?'

Question 2

Look at the illustration and answer the questions that follow.



a. What does the weather seem like this evening? What makes you think that?

b. What do you think they are cooking on the fire?

c. Where do you think they will get their water from?

d. How do you think they got to the camping spot?

Question 3

Read the sentences and answer the multi-choice questions using your inferring skills.

It was a dark and stormy night. Suddenly, there was a loud and slow knock on the door, which startled Gemma. She did not rush to the door and, when she arrived, opened it very slowly.

Why did Gemma open the door slowly? Select the correct answer from the following options.

- The door was just so heavy she struggled to open it.
- She was quite nervous and did not want to open the door quickly.
- Gemma was in the middle of watching something gripping on TV, and she was upset to have to leave it to answer the door.

Question 4

Read the sentences and answer the multi-choice questions using your inferring skills.

Yolanda sat at the table and spooned a little bit of the soup into her mouth. She then started to push the soup around with her spoon and looked at the empty chair. Her parents sat there quietly, waiting for her to say something.

Why did Yolanda push the soup around with her spoon? Select the correct answer from the following options.

- a. She did not like the soup.
- b. Her soup was very hot, and she wanted it to cool down.
- c. She missed her younger brother, who was away at school camp.

Finding Hidden Facts

Read the information **carefully** and answer the questions.

*Hint: All the names are usually given in the first sentence
— write these down as a list so you don't miss anyone.*



1. Joe, Dave, Avanti, Caley and Marco are comparing their favourite sports.

Joe, Dave and Marco like tennis. Caley likes badminton. Avanti and Dave like swimming. Everyone except Avanti likes rugby.

Who likes the **most** sports? _____

2. Mohammed, Gavin, Lucy, Heather and Kat are comparing their favourite animals.

Mohammed and Gavin like lions. Lucy and Mohammed like bats. Heather and Gavin like wolves. Everyone apart from Gavin likes snakes.

Who likes the **most** animals? _____

3. Mr Davis, Mr Li, Mrs Pike, Mr College and Mr Williamson teach science.

Everyone except Mr Li teaches Year 7. Mr College and Mr Davis teach Year 12 and Year 13. Mr Li teaches Year 9. Mrs Pike and Mr Davis teach Year 10.

Who teaches the **most** classes? _____

4. Maisie, Lotte, Milly, Sanjay and Ceara are discussing TV programmes they like.

Ceara and Sanjay like cartoons. Everyone likes comedy except Lotte. Maisie likes drama. Milly and Lotte like nature programmes.

Who likes the **fewest** types of programmes? _____

Logic - Multiple Statement Questions

Read the information **carefully** and answer the questions.

1. Murphy, Geeta, Simon, Matthew and Hector are comparing their pocket money. Murphy and Hector both get £3. Geeta gets £4. Simon gets half as much as Hector. Matthew gets twice as much as Geeta.

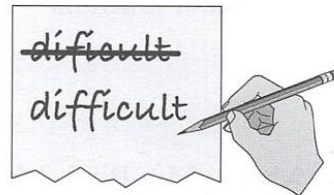
If these statements are true, only one of the sentences below **must** be true. Which one?

- A Geeta gets the most pocket money.
- B Hector and Murphy get £4 each.
- C Matthew gets less pocket money than Geeta.
- D Simon gets the least amount of pocket money.

2. Ezra, Lettice, Sam and Greg are doing a spelling test. Sam scores full marks. Greg and Lettice both get 11 wrong. Ezra scores 5 more than Lettice. The test has 40 questions.

If these statements are true, only one of the sentences below **cannot** be true. Which one?

- A Sam scores 40.
- B Greg scores 10 less than Sam.
- C Ezra scores 34.
- D They have half an hour to do the test.



3. Arundhati, Eddie, Gabby and Ailsa are measuring how tall they are. Eddie is 10 cm taller than Ailsa. Ailsa and Arundhati are only 5 cm apart in height. Arundhati is the shortest person. Gabby is shorter than Ailsa.

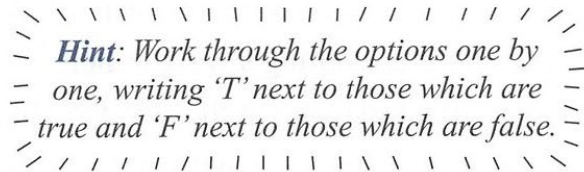
If these statements are true, only one of the sentences below **cannot** be true. Which one?

- A Ailsa is taller than Gabby.
- B Arundhati is 110 cm tall.
- C Ailsa is the second tallest.
- D Gabby is 5 cm shorter than Eddie.

4. Natasha, Edwin, Gary and Danvir are comparing how tall they are.
 Natasha is 7 cm taller than Danvir. Edwin is 160 cm tall.
 Danvir is 3 cm taller than Edwin. Gary is 3 cm shorter than Edwin.

If these statements are true, only one of the sentences below **must** be true. Which one?

- A Danvir is 162 cm tall.
- B Natasha is the tallest.
- C Gary is not the shortest.
- D Edwin is 157 cm tall.



Hint: Work through the options one by one, writing 'T' next to those which are true and 'F' next to those which are false.

5. Rebecca, Matteo, Meg and Helen are all on a quiz team. The team get 55 questions right. Rebecca and Matteo each answer the same number of questions correctly. Helen gets 5 more questions right than Meg. Meg answers 15 questions correctly.

If these statements are true, only one of the sentences below **cannot** be true. Which one?

- A Helen gets the most questions right.
- B Helen answers more questions right than Meg.
- C Rebecca and Matteo both get 15 questions right.
- D Meg answers more questions right than Matteo.

6. Sofya, Kirsten, Rohan and Max are playing cards. Sofya and Max both win the same number of games. Kirsten wins 3 games. Rohan wins twice as many games as Kirsten. They play 13 games altogether.

If these statements are true, only one of the sentences below **cannot** be true. Which one?

- A Rohan wins more games than Kirsten.
- B Sofya wins fewer games than Rohan.
- C Max wins 4 games.
- D Rohan wins the most games.

Understanding the Language in the Text

Read the information **carefully** and answer the questions.

1 Ethan was only two streets away from home, but he still had to trudge through
2 Markdown Park, which he knew would be a squelching sponge. He never enjoyed
3 that part of the walk, but today, with the persistent rain and wind, Ethan was even
4 more reluctant than usual to hang around in the area.

5 Ethan's black terrier, Charlie, became a shadow as soon as he passed through the
6 gate into the gloomy park. Charlie growled quietly to himself: he didn't seem to
7 appreciate this evening's walk either.

8 As Ethan glanced at the sky, the charcoal-coloured clouds glared down at him
9 and the wind whipped cruelly at his exposed face.

1. The author says that the park was a “sponge” (line 2). This shows that the ground is:
A soft and wet. B dry and hard. C clean and soft.
2. The author says that Ethan would have to “trudge” through the park (line 1).
What does this tell you about his walk?
A It would be quick. B It would be relaxing. C It would be slow and difficult.
3. The author says that Ethan was “more reluctant than usual” to be in the park (line 4).
Why do you think this is?
A He is tired. B The dog is growling. C The weather is horrible.
4. The author says that Charlie was a “shadow” once they entered the park (line 5).
This means that:
A He followed Ethan. B He was hard to see. C He was quiet.
5. The author says that the clouds “glared” at Ethan (line 8).
This suggests that the clouds looked:
A threatening. B safe. C comforting.

Verbal Reasoning

GL Techniques – Type Four

TECHNIQUE TYPE FOUR

Here there are two sets of words given. You must identify one word from the left-hand set which can be joined with one word from the right-hand set to make a new sensible compound word. The word from the left-hand set must always begin the new word. You are required to underline these two 'parts'.

Example:

wall / floor / man : on / paper / set

Technique:

Consider each word on the left-hand side SEPARATELY with each word on the right-hand side:

1. Test the first word on the left-hand side with each of the words on the right-hand side.

wall - on, wall - paper, wall - set

2. Continue then onto the second word on the left-hand side. Test that with each of the three words on the right-hand side.

floor - on, floor - paper, floor - set

3. Finally, test the third word on the left-hand side with each of the words on the right-hand side.

man - on, man - paper, man - set

(Here, the answer is *wallpaper*.)

NOTE:

1. By following the above technique, no possible combination will be overlooked as you are applying a thorough and systematic method. DO NOT 'jump about' looking randomly for the new word. This will often result in a waste of valuable time.

2. The new word often DOES NOT sound like the two separate words which you have chosen.

Example:

so	-	lid	=	solid
fat	-	her	=	father
met	-	hod	=	method
is	-	land	=	island
he	-	at	=	heat

To overcome this it is a matter of trying to 'slur' the pronunciation of the two words as you say them to yourself, if they do not appear to you on the first 'run through'. Be aware of letter combinations such as t - h, s - h, c - h, e - e, e - a and remember letters often blend to form a completely new and different sound.

3. The new word created must be a complete word in its own right such as 'playground', 'fireplace', 'wallpaper' and 'football'. It must not be a 'new' word which although it may have a new meaning, still remains as two separate words, such as 'wedding day', 'car park', 'window frame' and 'sofa bed'. These combinations are often put in to 'catch you out'!

Example:

play / wind / set : low / ground / up

Even though here *play* can be linked with 'ground' and 'up', *playground* is the correct answer as 'play up' remains as two separate words.

4. Finally when you have done everything you can and you still cannot find the answer, quickly WRITE DOWN all nine possible combinations of letters and LOOK at them. The answer is there and all you have to do is recognise it!
Try these:

Example:

real / rise / reap : ally / peat / pear

Write:

realally, realpeat, realpear
riseally, risepeat, risepear
reapally, reappeat, reappear

Answer: *reappear*

Example:

lad / come / part : ties / pies / dies

Write:

ladties, ladpies, laddies
cometies, comepies, comedies
partties, partpies, partdies

Answer: *comedies*

PRACTICE TYPE FOUR

A word on the left-hand side will join together with a word on the right-hand side to form a completely new and proper word. The word on the left-hand side always begins this new word. Underline the two words, one from each group.

For Example:

sit / will / man : now / age / ton

Now try these:

box / police / hit	:	post / station / man
ten / he / up	:	on / so / hat
lace / hop / sat	:	near / up / in
post / cut / win	:	she / man / big
hear / wit / book	:	cat / ear / her
sofa / deck / ship	:	lay / bed / chair
go / house / from	:	pond / wife / roof
be / pal / pup	:	will / at / on
met / top / me	:	ten / in / an
hot / hay / pin	:	cup / stack / win
lost / mess / cross	:	age / ace / ice
will / in / near	:	on / by / sit
toe / hang / foot	:	shoe / ball / on
cat / lid / no	:	up / in / on
rim / rat / set	:	hot / him / her
tin / stamp / letter	:	post / box / opener
slit / met / cup	:	her / ton / man
bus / car / way	:	gone / goes / give
well / block / cat	:	age / cup / hat
sit / lamp / bath	:	chair / room / way

Non-Verbal Reasoning

Find the Figure like the First 2 or 3

Title in the book will be “Similarities”

Instructions: Find which of the options from A to E is most similar to the three shapes on the left.

Explanation:

STEP 1

Firstly, you must ignore all of the options given (A, B, C, D ...)

You cannot work out which option is most similar, until you know what you are looking for and what makes the shapes similar to each other.

STEP 2

Find what makes the shapes on the left similar to each other.

Focus on one detail at a time.

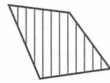
Things to look out for:

- 1) Are they the exact same shape, just rotated?
- 2) Is there a connection between the number of sides the shapes have?
- 3) Same colours or shading
- 4) Same types of lines used (dotted, solid, dashed...)
- 5) Are there arrows pointing at a particular shape?
- 6) Do all the shapes have an element in common which you can easily spot?
- 7) Is there a general connection between the number of things in each shape on the left?
 - Sometimes each shape on the left is made up of more than one shape, and when the sides are added together, they all equal the same number.

Section 3 – Find the Figure Like the First Two

Work out which option is most like the two figures on the left.

Example:



a

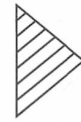
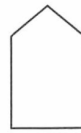
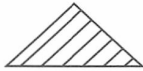
b

c

d

Answer: a

1



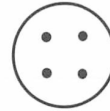
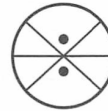
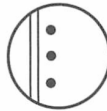
a

b

c

d

2



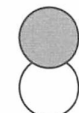
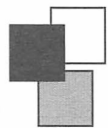
a

b

c

d

3



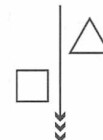
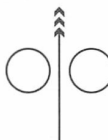
a

b

c

d

4



a

b

c

d

5

a b c d

6

a b c d

7

a b c d

8

a b c d

9

a b c d

10

a b c d

Section 4 – Find the Figure Like the First Three

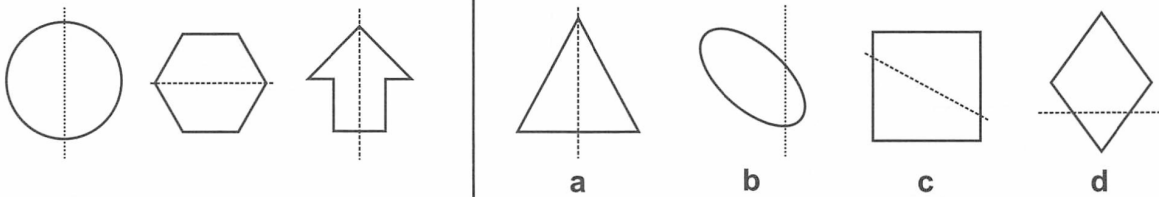
Work out which option is the most like the three figures on the left.

Example:



Answer: b

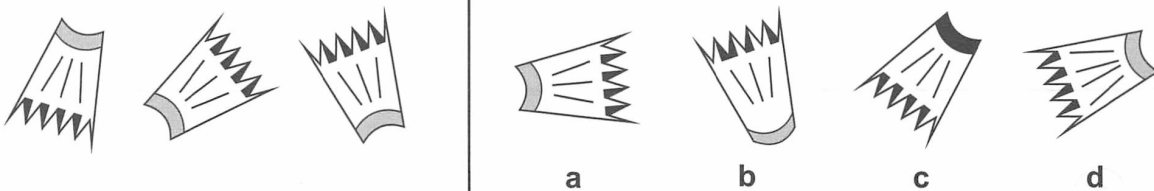
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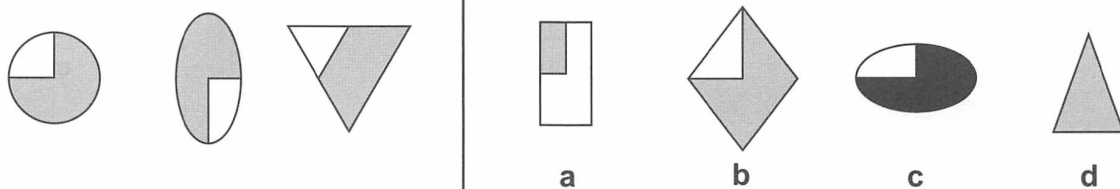
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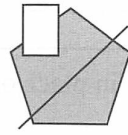
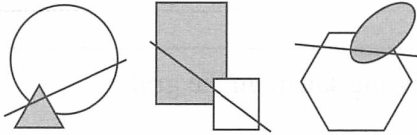
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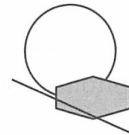
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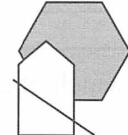
5



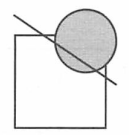
a



b

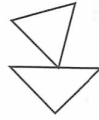
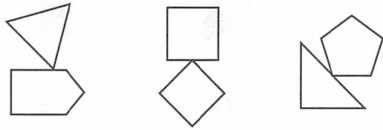


c

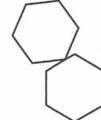


d

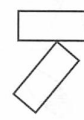
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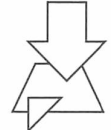
a



b

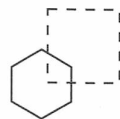
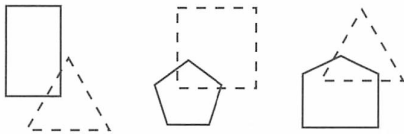


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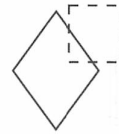


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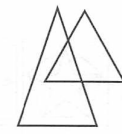
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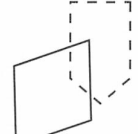
a



b

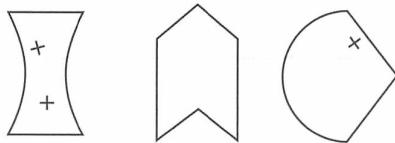


c

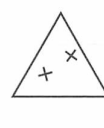


d

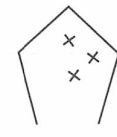
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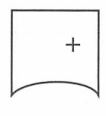
a



b

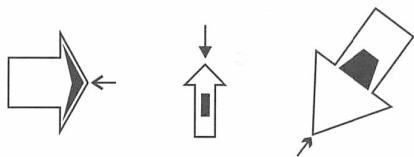


c

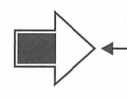


d

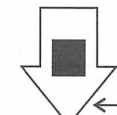
9



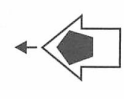
a



b

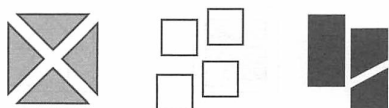


c



d

10



a



b



c

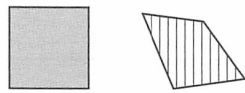


d

Section 4 – Find the Figure Like the First Two

Work out which option is most like the two figures on the left.

Example:



a

b

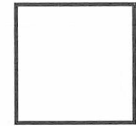
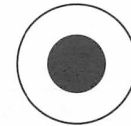
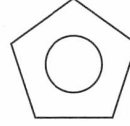
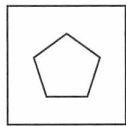
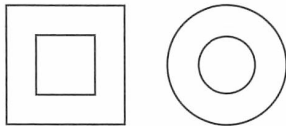
c

d

e

Answer: a

1



a

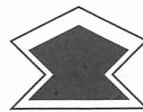
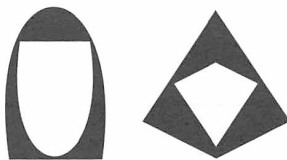
b

c

d

e

2



a

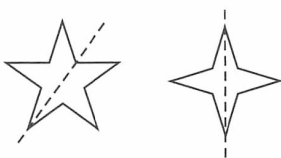
b

c

d

e

3



a

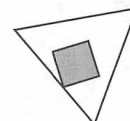
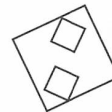
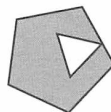
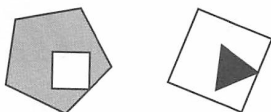
b

c

d

e

4



a

b

c

d

e

Quick Lesson Recap

1) $(2^2 + 6 \times 2) \div 4 - 7 =$

2) $8 - 6 \times 2 + 5 =$

3) $(6 + 3^2 \div 3) \times 4 + 8 =$

4) What is a superlative adjective?

5) What are the comparative and superlative adjectives for the word 'good'?

6) What are the comparative and superlative adjectives for the word 'bad'?

Now use some of the methods you have learnt previously to solve these.

7) $452 \times 8 =$

8) $22,626 \div 9 =$

9) $85 \times 7 =$

10) $22.7 \div 100 =$

Homework – Vocabulary to memorise



Vocabulary 4

Learn the following words and then answer the questions.

- Permanent** (adj.): perpetual, lasting, constant, unchangeable.
The champion jockey was lucky because her injury was not permanent and healed quickly.
- Leisure** (n.): relaxation, rest, recreation.
After a hard day at school, it is necessary to have some time for leisure before doing homework.
- Ridiculous** (adj.): absurd, silly, outrageous.
Many years ago the idea of sending a man to the Moon was considered ridiculous.
- Fossil** (n.): remains of a plant or animal that existed in a previous time, relic, remnant.
Fossil hunters have found the bones of an elephant believed to be 500,000 years old.
- Limitation** (n.): restraint, control, block, condition.
The slow broadband in our area is a limitation for businesses that want to expand.
- Misuse** (v.): waste, abuse, mistreat, use incorrectly.
It is important not to misuse natural resources; forests cannot be replaced.
- Interrogate** (v.): question intensely, interview, cross-examine.
Detectives started to interrogate the suspect about the burglary and where he had been at the time of the crime.
- Accept** (v.): consent to receive, take, agree, recognise as correct.
My sister has decided to accept an offer from a top university although it is a long way from home.
- Havoc** (n.): destruction, disaster, confusion.
The tsunami caused havoc all along the coastline, flooding and destroying buildings.
- Masterpiece** (n.): perfection, work of genius, stunning success.
The painting had such vivid strokes of colour and detail, it was truly a masterpiece.



Synonym Exercise A

Write the word from the vocab list which is most **similar** in meaning next to each word listed below.

1. Silly
2. Question
3. Relaxation
4. Agree
5. Relic.....
6. Mistreat
7. Restraint.....
8. Lasting.....
9. Destruction.....
10. Perfection.....



Exercise B

Write the most suitable word from the vocab list in the spaces below. You might need to change the form of the word; for instance, walk might become walked.

1. If politicians their power, there will be public discontent.
2. My granny thinks it is that people text so frequently.
3. The discovery of a new causes great excitement for biologists.
4. Many shops no longer..... payment by cheque.
5. My uncle became a citizen after spending three years in the U.S.A.
6. A recent earthquake caused great throughout the countryside.
7. Mum places aon my screen time on school days.
8. The teacher had to the entire class in order to discover who had stolen the book.
9. The Prado Gallery in Madrid is home to many a
10. I really want to go to the centre this weekend to practise my swimming.

Write a full sentence using each of the words in your new vocabulary

Do not copy any of the examples

Permenant: _____

Leisure: _____

Ridiculous: _____

Fossil: _____

Limitation: _____

Misuse: _____

Interrogate: _____

Accept: _____

Havoc: _____

Masterpiece: _____

Homework – Memorise the following two page:

Fraction	Decimal	Percentage
1	1	100%
$\frac{1}{2}$	0.5	50%
$\frac{1}{3}$	0.333	33%
$\frac{1}{4}$	0.25	25%
$\frac{1}{5}$	0.2	20%
$\frac{1}{6}$	0.166	16.6%
$\frac{1}{7}$	0.142	14.2%
$\frac{1}{8}$	0.125	12.5%
$\frac{1}{9}$	0.111	11.1%
$\frac{1}{10}$	0.1	10%
$\frac{1}{20}$	0.05	5%

Conversion Rates

Time

1 Minute = 60 seconds

1 Hour = 60 Minutes

1 Day = 24 Hours

1 Week = 7 Days

1 Fortnight = 2 Weeks

1 Year = 52 Weeks

1 Year = 12 months

1 Year = 365 Days

1 Decade = 10 Years

1 Century = 100 Years

1 Millennium = 1000 Years



Weight



1 Tonne = 1000 Kilograms

1 Kilogram = 1000 Grams

1 Gram = 100 Centigrams

1 Gram = 1000 Milligrams

1 Stone = 14 Pounds

1 Pound = 16 Ounces

Length

1 Centimetre = 10 Millimetres

1 Metre = 100 Centimetres

1 Kilometre = 1000 Metres

5 Miles ≈ (approximately equal to) 8 Kilometres

1 Foot = 12 Inches

1 Yard = 3 Feet



Capacity

1 Kilolitre = 1000 Litre

1 Litre = 1000 millilitres

1 Litre = 100 centilitres

1 Centilitre = 10 millilitres



Learn a few of these each day!

Perhaps you could tick them off
as you learn them?

Square Numbers

A square number is the product of a number multiplied by itself.

For example $1^2 = 1 \times 1 = 1$, so 1 is the first square number and $2^2 = 2 \times 2 = 4$, so 4 is the next square number. You should memorise the first 15 square numbers:

1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196 and 225

Cube Numbers

A Cube number is the product of a number multiplied by itself 3 times.

For example $1^3 = 1 \times 1 \times 1 = 1$, so 1 is the first cube number and $2^3 = 2 \times 2 \times 2 = 8$, so 8 is the next cube number. You should memorise the first 10 cube numbers:

1, 8, 27, 64, 125, 216, 343, 512, 729 and 1000

Prime Numbers

A prime number is a number with 2 factors, 1 and itself, so the first prime number is 2 as its factors is 1. You should learn to recognize the prime numbers up to 100:

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89 and 97

1 x	2 x	3 x	4 x	5 x	6 x
1 x 1 = 1	2 x 1 = 2	3 x 1 = 3	4 x 1 = 4	5 x 1 = 5	6 x 1 = 6
1 x 2 = 2	2 x 2 = 4	3 x 2 = 6	4 x 2 = 8	5 x 2 = 10	6 x 2 = 12
1 x 3 = 3	2 x 3 = 6	3 x 3 = 9	4 x 3 = 12	5 x 3 = 15	6 x 3 = 18
1 x 4 = 4	2 x 4 = 8	3 x 4 = 12	4 x 4 = 16	5 x 4 = 20	6 x 4 = 24
1 x 5 = 5	2 x 5 = 10	3 x 5 = 15	4 x 5 = 20	5 x 5 = 25	6 x 5 = 30
1 x 6 = 6	2 x 6 = 12	3 x 6 = 18	4 x 6 = 24	5 x 6 = 30	6 x 6 = 36
1 x 7 = 7	2 x 7 = 14	3 x 7 = 21	4 x 7 = 28	5 x 7 = 35	6 x 7 = 42
1 x 8 = 8	2 x 8 = 16	3 x 8 = 24	4 x 8 = 32	5 x 8 = 40	6 x 8 = 48
1 x 9 = 9	2 x 9 = 18	3 x 9 = 27	4 x 9 = 36	5 x 9 = 45	6 x 9 = 54
1 x 10 = 10	2 x 10 = 20	3 x 10 = 30	4 x 10 = 40	5 x 10 = 50	6 x 10 = 60
1 x 11 = 11	2 x 11 = 22	3 x 11 = 33	4 x 11 = 44	5 x 11 = 55	6 x 11 = 66
1 x 12 = 12	2 x 12 = 24	3 x 12 = 36	4 x 12 = 48	5 x 12 = 60	6 x 12 = 72
7 x	8 x	9 x	10 x	11 x	12 x
7 x 1 = 7	8 x 1 = 8	9 x 1 = 9	10 x 1 = 10	11 x 1 = 11	12 x 1 = 12
7 x 2 = 14	8 x 2 = 16	9 x 2 = 18	10 x 2 = 20	11 x 2 = 22	12 x 2 = 24
7 x 3 = 21	8 x 3 = 24	9 x 3 = 27	10 x 3 = 30	11 x 3 = 33	12 x 3 = 36
7 x 4 = 28	8 x 4 = 32	9 x 4 = 36	10 x 4 = 40	11 x 4 = 44	12 x 4 = 48
7 x 5 = 35	8 x 5 = 40	9 x 5 = 45	10 x 5 = 50	11 x 5 = 55	12 x 5 = 60
7 x 6 = 42	8 x 6 = 48	9 x 6 = 54	10 x 6 = 60	11 x 6 = 66	12 x 6 = 72
7 x 7 = 49	8 x 7 = 56	9 x 7 = 63	10 x 7 = 70	11 x 7 = 77	12 x 7 = 84
7 x 8 = 56	8 x 8 = 64	9 x 8 = 72	10 x 8 = 80	11 x 8 = 88	12 x 8 = 96
7 x 9 = 63	8 x 9 = 72	9 x 9 = 81	10 x 9 = 90	11 x 9 = 99	12 x 9 = 108
7 x 10 = 70	8 x 10 = 80	9 x 10 = 90	10 x 10 = 100	11 x 10 = 110	12 x 10 = 120
7 x 11 = 77	8 x 11 = 88	9 x 11 = 99	10 x 11 = 110	11 x 11 = 121	12 x 11 = 132
7 x 12 = 84	8 x 12 = 96	9 x 12 = 108	10 x 12 = 120	11 x 12 = 132	12 x 12 = 144

