



BROAD HORIZON
— T U I T I O N —

11+ Tuition

Year 5 - Intensive

Week 2 – Session 1

ANSWERS

Maths

Mean, Mode, Median and Range - Explanation

Name : _____ Score : _____

Teacher : _____ Date : _____

Mean, Mode, Median, and Range

1) ^{8, 4, 4, 8, 9, 7, 2}
2, 4, 4, 7, 8, 8, 9

Mean 6 Median 7 Mode 4, 8 Range 7

6) ^{3, 4, 2}
2, 3, 4

Mean 3 Median 3 Mode None Range 2

2) ^{7, 5, 6}
5, 6, 7

Mean 6 Median 6 Mode None Range 2

7) ^{6, 7, 8}
6, 7, 8

Mean 7 Median 7 Mode None Range 2

3) ^{6, 8, 9, 8, 4}
4, 6, 8, 8, 9

Mean 7 Median 8 Mode 8 Range 5

8) ^{2, 6, 5, 4, 3}
2, 3, 4, 5, 6

Mean 4 Median 4 Mode None Range 4

4) ^{5, 6, 4, 6, 4, 2, 1}
1, 2, 4, 4, 5, 6, 6

Mean 4 Median 4 Mode 4, 6 Range 5

9) ^{8, 8, 5, 9, 5}
5, 5, 8, 8, 9

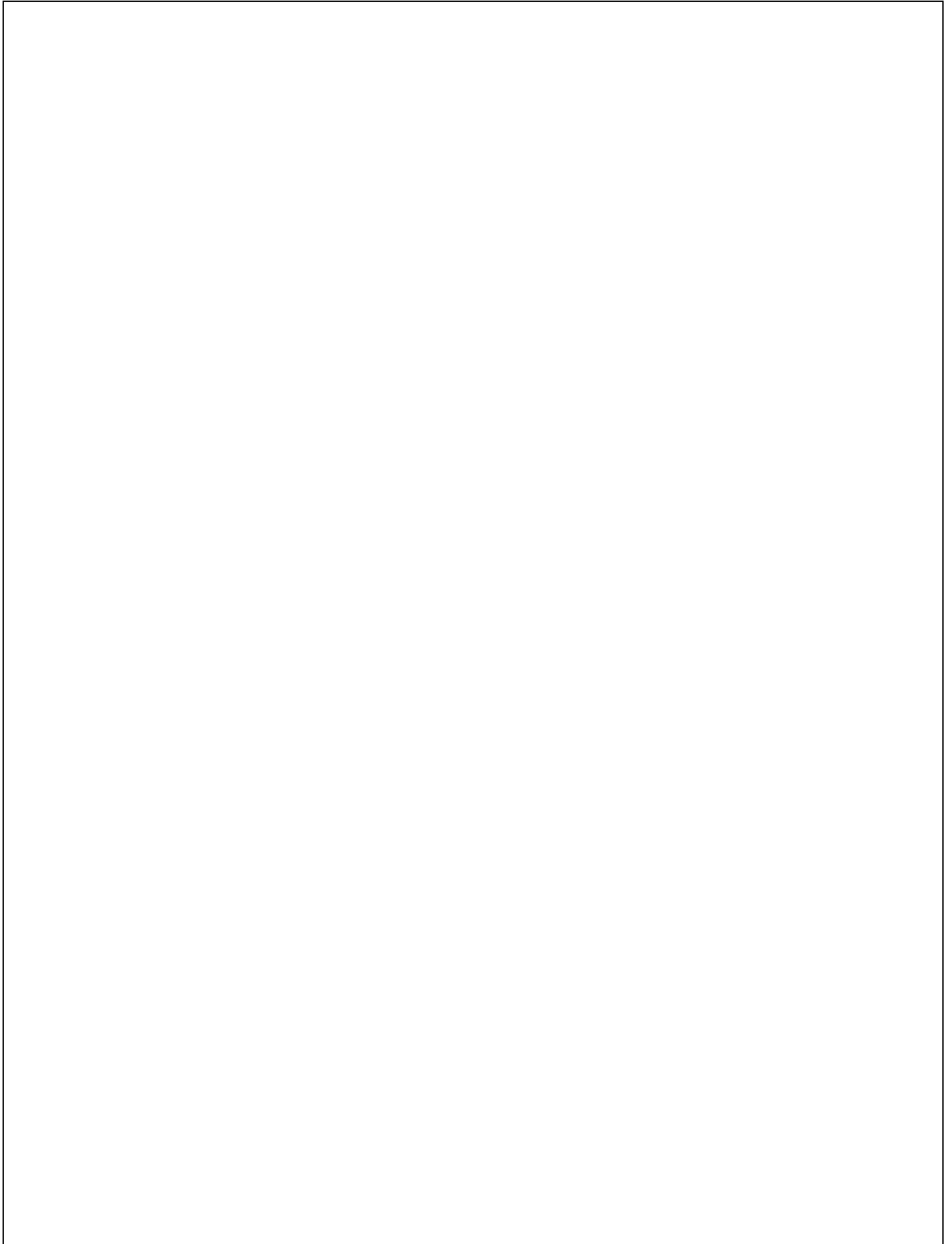
Mean 7 Median 8 Mode 5, 8 Range 4

5) ^{7, 9, 2}
2, 7, 9

Mean 6 Median 7 Mode None Range 7

10) ^{2, 8, 4, 4, 8, 8, 8}
2, 4, 4, 8, 8, 8, 8

Mean 6 Median 8 Mode 8 Range 6



Name : _____ Score : _____

Teacher : _____ Date : _____

Mean, Mode, Median, and Range

1) 3, 8, 2, 3
2, 3, 3, 8

Mean 4 Median 3 Mode 3 Range 6

6) 8, 9, 8, 8, 9, 9, 9, 4
4, 8, 8, 8, 9, 9, 9, 9

Mean 8 Median 8.5 Mode 9 Range 5

2) 7, 9, 7, 9
7, 7, 9, 9

Mean 8 Median 8 Mode 7, 9 Range 2

7) 3, 7, 2, 8
2, 3, 7, 8

Mean 5 Median 5 Mode None Range 6

3) 6, 7, 3, 3, 6, 5
3, 3, 5, 6, 6, 7

Mean 5 Median 5.5 Mode 3, 6 Range 4

8) 6, 9, 2, 8, 2, 4, 7, 2
2, 2, 2, 4, 6, 7, 8, 9

Mean 5 Median 5 Mode 2 Range 7

4) 8, 5, 3, 8
3, 5, 8, 8

Mean 6 Median 6.5 Mode 8 Range 5

9) 7, 5, 9, 5, 2, 2
2, 2, 5, 5, 7, 9

Mean 5 Median 5 Mode 2, 5 Range 7

5) 5, 6, 8, 5, 6, 6
5, 5, 6, 6, 6, 8

Mean 6 Median 6 Mode 6 Range 3

10) 7, 4, 8, 2, 5, 7, 8, 7
2, 4, 5, 7, 7, 7, 8, 8

Mean 6 Median 7 Mode 7 Range 6

Name : _____ Score : _____

Teacher : _____ Date : _____

Mean, Mode, Median, and Range

1) 16, 14, 15, 15, 15, 9
9, 14, 15, 15, 15, 16

Mean 14 Median 15 Mode 15 Range 7

6) 13, 14, 10, 11
10, 11, 13, 14

Mean 12 Median 12 Mode None Range 4

2) 17, 11, 6, 9, 8, 9
6, 8, 9, 9, 11, 17

Mean 10 Median 9 Mode 9 Range 11

7) 8, 19, 18, 13, 12, 8
8, 8, 12, 13, 18, 19

Mean 13 Median 12.5 Mode 8 Range 11

3) 16, 20, 15, 16, 15, 13, 19, 6
6, 13, 15, 15, 16, 16, 19, 20

Mean 15 Median 15.5 Mode 15, 16 Range 14

8) 16, 11, 13, 12
11, 12, 13, 16

Mean 13 Median 12.5 Mode None Range 5

4) 8, 6, 10, 8
6, 8, 8, 10

Mean 8 Median 8 Mode 8 Range 4

9) 16, 7, 19, 11, 19, 18
7, 11, 16, 18, 19, 19

Mean 15 Median 17 Mode 19 Range 12

5) 19, 6, 5, 19, 11, 6, 11, 19
5, 6, 6, 11, 11, 19, 19, 19

Mean 12 Median 11 Mode 19 Range 14

10) 19, 11, 7, 7, 8, 20, 11, 13
7, 7, 8, 11, 11, 13, 19, 20

Mean 12 Median 11 Mode 7, 11 Range 13

Negative Number Addition and Subtraction - Practice**1. Calculate the following:**

a. $4 - 5 = -1$

b. $2 + (-6) = -4$

c. $10 - 12 = -2$

d. $-10 + 2 = -8$

e. $-4 + 3 = -1$

f. $-7 + 11 = 4$

g. $-4 + (-8) = -12$

h. $-2 + 3 = 1$

i. $-2 - 8 = -10$

j. $10 - (-9) = 19$

k. $-2 - (-16) = -2 + 16 = 14$

l. $7 - (-4) = 7 + 4 = 11$

m. $11 - 20 = -9$

n. $43 - 56 = -13$

o. $-21 + (-15) = -36$

Question 1:

(a) -1 (b) -2 (c) -5 (d) -4 (e) -2 (f) -1 (g) -3 (h) -8
(i) 2 (j) 6 (k) 3 (l) -5 (m) 3 (n) -2 (o) -9 (p) 6
(q) -5 (r) -5 (s) -9 (t) -6 (u) -10 (v) -13 (w) -21 (x) -28

Question 2:

(a) 4 (b) -3 (c) -4 (d) -2 (e) -4 (f) -5 (g) -10 (h) 4
(i) -3 (j) -12 (k) -13 (l) -5 (m) -15 (n) 1 (o) -11 (p) -70

Question 3:

(a) 3 (b) 4 (c) 1 (d) -2 (e) -6 (f) -7 (g) -3 (h) -7
(i) -10 (j) -9 (k) -21 (l) -12

Question 4:

(a) 5 (b) 1 (c) 4 (d) -3 (e) -8 (f) -7 (g) -13 (h) -2
(i) -6 (j) -8 (k) -33 (l) -10

Question 5:

(a) 3 (b) 4 (c) 8 (d) 10 (e) 11 (f) 3 (g) -1 (h) -5
(i) 4 (j) 1 (k) -7 (l) 18

Question 6:

(a) -4 (b) -4 (c) -12 (d) -7 (e) -13 (f) 13 (g) -13 (h) 3
(i) 5 (j) -3 (k) -17 (l) -5 (m) 17 (n) -14 (o) -11 (p) -23
(q) 6 (r) 17 (s) -19 (t) -14 (u) -55 (v) -28 (w) -31 (x) 80
(y) 9 (z) 38

Negative Number Multiplication and Division – Practice**2. Calculate the following:**

a. $4 \times -2 = -8$

b. $-11 \times 12 = -132$

c. $10 \times -8 = -80$

d. $-18 \div -3 = 6$

e. $-56 \div 7 = -8$

f. $-64 \div -4 = 16$

g. $-9 \times -12 = 108$

h. $24 \times -6 = -144$

i. $-120 \div 4 = -30$

j. $685 \div -5 = -137$

k. $-7 \times -13 = 91$ (this one stays the same, since two negatives make positive)

l. $12 \div -0.5 = -24$

m. $-1 \div -2 = 0.5$

n. $-146 \times 6 = -876$

o. $-254 \times -8 = 2032$

p. $(-12)^2 = 144$

q. $(-8)^2 = 64$

r. $(-3)^3 = -27$

Question 1:

| | | | |
|----------|----------|---------|---------|
| (a) -6 | (b) -12 | (c) -25 | (d) 14 |
| (e) 18 | (f) -32 | (g) -27 | (h) 40 |
| (i) -63 | (j) -80 | (k) -28 | (l) 48 |
| (m) -33 | (n) -60 | (o) 144 | (p) -35 |
| (q) -72 | (r) 56 | (s) -72 | (t) -52 |
| (u) -110 | (v) 120 | (w) 98 | (x) 234 |
| (y) -175 | (z) -336 | | |

Question 2:

| | | | |
|---------|---------|----------|---------|
| (a) -12 | (b) -30 | (c) 60 | (d) 120 |
| (e) 36 | (f) -60 | (g) -128 | (h) 140 |

Question 3:

| | | | |
|---------|--------|---------|---------|
| (a) 9 | (b) 36 | (c) 4 | (d) 1 |
| (e) 100 | (f) 64 | (g) 144 | (h) 400 |

Question 4:

| | | | |
|--------|------------|--------|----------|
| (a) -8 | (b) -27 | (c) -1 | (d) -125 |
| (e) 1 | (f) 10,000 | (g) 16 | (h) 81 |

Question 5:

| | | | |
|---------|---------|--------|---------|
| (a) -5 | (b) -4 | (c) -6 | (d) -7 |
| (e) -3 | (f) -3 | (g) -4 | (h) -8 |
| (i) 2 | (j) 7 | (k) 10 | (l) 6 |
| (m) -1 | (n) -8 | (o) 1 | (p) -12 |
| (q) -9 | (r) 12 | (s) -4 | (t) -25 |
| (u) -19 | (v) 7 | (w) 12 | (x) 43 |
| (y) -6 | (z) -38 | | |

Question 6:

| | | | |
|-----------|-----------|----------|----------|
| (a) 45 | (b) -4 | (c) -11 | (d) -24 |
| (e) 8 | (f) -84 | (g) -9 | (h) 32 |
| (i) -48 | (j) 42 | (k) -5 | (l) -8 |
| (m) 9 | (n) 70 | (o) -110 | (p) -13 |
| (q) 270 | (r) 17 | (s) -1 | (t) 4.5 |
| (u) -8.5 | (v) -22 | (w) 9.3 | (x) 18.6 |
| (y) -94.5 | (z) -10.4 | | |

Verbal Reasoning – Technique Type 1 -5

TYPE TEN:

thimble pins
 chalk crayon
 duvet bedspread
 cap fez
 beaker bowl
 wrist ankle
 lungs kidney
 uncle brother
 aunt princess
 pond stream
 cub cygnet
 badger bull
 sycamore chestnut
 midge gnat
 paraffin brine
 sandal trainers
 keg flagon
 canoe yacht
 harp viola
 cornet saxophone

TYPE ELEVEN:

| | | |
|---|---|---|
| E | A | E |
| C | C | A |
| B | D | B |
| A | A | E |
| | | |
| C | B | D |
| D | A | E |
| E | A | C |
| B | C | B |

TYPE TWELVE:

sparrow
 dogfish
 mongoose
 heron
 racket
 petal
 cone
 pip
 mayonnaise
 metal
 bottle
 nest
 pearl
 queen
 brother
 fork
 cereal
 athlete
 cat
 whales

TYPE THIRTEEN:

car
 36
 orange
 sergeant
 toddler
 cup
 3.15 a.m.
 July
 hour
 pentagon
 £4.40
 tug
 Wednesday
 366
 fifth
 dog
 word
 river
 shopping bag
 trio

TYPE FOURTEEN:

sparkle
 parade
 daisy
 stronger
 refine
 failure
 sorceror
 travel
 trail natal
 curse rescue
 trample linear
 notes stone
 soap strap
 facet magnet
 lease class
 shopper stoop
 metal steal
 steak freak
 motion spoon
 credit tread

TYPE FIFTEEN:

4
 J
 16th
 S
 N
 I
 O
 I
 RIP
 A B C D E
 D
 N
 A
 N
 AT
 IS
 T
 16th
 11th
 C

Comprehensions

Test 3 - A Modern Cinderella

| Question | Answer | Source of Answer |
|----------|--------|--|
| 1 | B | Refer to line 1: 'Among green New England hills...' |
| 2 | D | Knowledge of vocabulary required. The word 'picturesque' means visually attractive in a charming way. Therefore, the best option is 'aesthetically ideal'. |
| 3 | D | Refer to line 3: '...a brook ran babbling through the orchard than encompassed it about...' |
| 4 | C | Refer to line 7: 'One summer morning...' |
| 5 | A | Reader's personal judgement required. Refer to the description of Nan in lines 12-13 to help form an opinion as to how Nan should be received. As she is described as 'blue-eyed' and 'soft-featured', it is likely that the reader is intended to think that she is likeable. |
| 6 | C | Refer to lines 25-26: '...for it's the only thing fit for me this hot weather.' |
| 7 | C | Knowledge of grammar required. A verb is a word that conveys an action. The action in this sentence is 'going', so the verb is 'went'. |
| 8 | C | Knowledge of vocabulary required. The word 'domestic' means existing inside a particular country or home. An antonym is a word that means the opposite of another word. Therefore, the option here that is the best antonym for 'domestic' is 'foreign'. |
| 9 | E | Reader's personal judgement required. Refer to the description of Nan in lines 52-59 to help form an opinion as to which of the given options provides the best description of her character. Words and phrases such as 'diligent' (line 52) and '...spirits would fail, though patience never' (line 59) imply that Nan is patient. |
| 10 | A | Reader's logical inference required. Refer to lines 53-59 to make a decision as to which of the given options best summarises the problem with the kitchen. Phrases such as '...rebellion broke out everywhere' (line 55) imply that it is messy and problem-filled. |
| 11 | B | Knowledge of literary techniques required. The quoted phrase is an example of a simile. A simile is a phrase that makes a comparison between two different things through a connective word such as 'like' or 'as'. |
| 12 | A | Reader's logical inference required. Refer to line 60 in the context of the passage in order to make a decision as to why Nan is 'growing hotter and wearier'. As the previous two paragraphs consist of descriptions of Nan's numerous tasks, it is likely that she is becoming hot and overworked. |
| 13 | C | Reader's personal judgement required. Refer to the referenced speech in lines 66-69 to help form an opinion as to what its main message is. By focussing on key phrases such as 'Help cometh from afar...' (line 67), it can be inferred that its main message is that 'Friends can help.' |
| 14 | B | Reader's personal judgement required. Refer to lines 70-76 to help form an opinion as to her response to John Lord. Words such as 'honest', 'kind' and 'helpful' in line 72, 'most welcome' in line 73 and 'grateful' in line 76 imply that she is grateful to see him. |
| 15 | E | Reader's personal judgement required. Look at the text as a whole to help form an opinion as to which character is the focus of the passage. As a great deal of the text is given over to describing Nan and her actions, it can be inferred that Nan is the main character in this story. |

Test 5 - Five Children and It

| Question | Answer | Source of Answer |
|----------|--------|--|
| 1 | C | Knowledge of vocabulary required. A 'fly' is a horse and carriage. This can also be inferred from lines 2-3 'the children began to put their heads out of the carriage window'. |
| 2 | A | Reader's logical inference required. Refer to the quoted sentence in the context of the passage to make a decision as to how the children were feeling. It is most likely that they were feeling restless or impatient as none of the other options seem plausible. |
| 3 | B | Reader's logical inference required. Refer to the description of the route to the house in the first paragraph and to line 24-25 '...the house was deep in the country...' The word 'rural' means characteristic of the countryside and is therefore the best option. |
| 4 | E | Knowledge of vocabulary required. An 'orchard' is a place where fruit trees are grown. Therefore, 'e' is the best option. |
| 5 | B | Reader's logical inference required. Refer to the description of the mother's actions in lines 14-20 to make a decision as to which statement is true. As she 'was in no hurry' (line 15), it is most likely that she was the least excited. |
| 6 | A | Refer to lines 24-27: '...the house was deep in the country...and the children had been in London for two years...so the White House seemed to them a sort of Fairy Palace...' |
| 7 | E | Reader's logical inference required. Refer to lines 30-34. The best option is 'There is nothing for them to do' as the narrator says that '...London has none of those nice things that children may play with...' (lines 32-33). |
| 8 | C | Refer to lines 40-44: '...children who live in towns are so extremely naughty...Children in the country are naughty sometimes, too, but that is for quite different reasons.' |
| 9 | A | Reader's logical inference required. Refer to lines 45-46 to make a decision as to why the children needed to be cleaned. As it says that 'The children had explored the gardens...' (line 45), it is likely that they are dirty for this reason, so option 'a' is the best. |
| 10 | D | Knowledge of literary techniques required. The quoted phrase is an example of a simile. A simile is a phrase that makes a comparison between two different things through a connective word such as 'like' or 'as'. |
| 11 | D | Refer to lines 53-54: '...Robert had found the broken swing and tumbled out of it and got a lump on his head...' |
| 12 | C | Reader's logical inference required. Refer to lines 58-61 to make a decision as to what the narrator is implying. As the narrator says that 'The best part of it all was that there were no rules...', he seems to be implying that the children disliked the rules in London. |
| 13 | A | Refer to lines 65-67: '...when the big chimneys were smoking...the valley looked as if it was filled with golden mist...' |
| 14 | B | Knowledge of vocabulary required. The word 'enchanted' means appearing to be under a spell. A synonym is a word that means the same, or nearly the same, as another word. Therefore, the option here that is the best synonym for 'enchanted' is 'magical'. |
| 15 | E | Reader's personal judgement required. Look at the passage as a whole to help form an opinion as to from whose perspective any opinions are given. As the pronoun 'I' is used throughout the passage, it is written in 1st person narrative. Therefore, any opinions are from the narrator's perspective, e.g. '...I am sure some tiresome person must have told you...' (lines 37-38). |

Comprehension skills**Question 1: B**

Kettles boiling over is an actual event (even if “obstreperously” is dramatic).

Question 2: D

A house cannot literally “wear” an aspect — that’s figurative/personification.

Question 3: B

“Domestic purgatory” means the kitchen feels like suffering/hard work.

Question 4: C

Not a real haunting — it means the stove created stress/problems.

Question 5: A

“Rebellion” means everything is going wrong (kettles, mutton, irons, etc.).

Question 6: C

“Like a fiery furnace” is figurative language to emphasise the heat.

Question 7: B

They felt exhausted/discouraged, but Nan kept going patiently.

Question 8: B

This is the core rule pupils must learn.