

Maths – Mean Averages

Look at this list of numbers.

90, 80, 30, 80

What is the mean?

- ☐ a) 75
- ☐ b) 60
- ☐ c) 80
- ☐ d) 50
- ☒ e) 70

What is the mean of 14, 6 and 16?

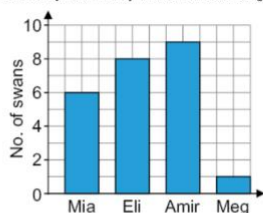
- ☒ a) 12
- ☐ b) 13
- ☐ c) 8
- ☐ d) 10
- ☐ e) 9

In a shop, three of the members of staff each work 30 hours a week and the other two members of staff each work 20 hours a week.

What is the mean number of hours worked per person each week?

- ☒ a) 26 hours
- ☐ b) 20 hours
- ☐ c) 27 hours
- ☐ d) 30 hours
- ☐ e) 25 hours

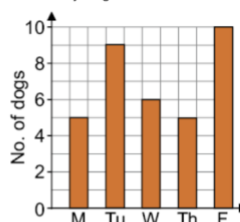
Four children count how many swans they saw on a walk along a river. Their results are shown in the graph.



What was the mean number of swans seen by each child?

- ☐ a) 2
- ☐ b) 3
- ☒ c) 6
- ☐ d) 7
- ☐ e) 5

A dog-walker records how many dogs she walks each day for 5 days, and displays her results in the graph below.



What is the mean number of dogs she walks per day?

- ☐ a) 8
- ☐ b) 5
- ☐ c) 6
- ☒ d) 7
- ☐ e) 9

What is the mean of the numbers shown on the cards below?



The speeds of four racing cars as they crossed the finish line are shown below.

90 mph, 80 mph, 100 mph, 90 mph

What was the mean speed of the four cars as they crossed the finish line?

- ☒ a) 90 mph
- ☐ b) 95 mph
- ☐ c) 80 mph
- ☐ d) 100 mph
- ☐ e) 85 mph

- ☐ a) 14
- ☒ b) 15
- ☐ c) 16
- ☐ d) 17
- ☐ e) 18

Work out the mean of the following sets of numbers.

1. 4, 3, 7, 8, 8

Answer: 6

2. 8, 12, 8, 7, 10

Answer: 9

3. 5, 9, 7, 6, 4, 17

Answer: 8

4. 9, 8, 10, 12, 9, 12

Answer: 10

5. 10, 8, 11, 11, 2, 4, 12, 6

Answer: 8

/ 5

6. Rajeev sprints for 80 m five times. The times taken to sprint each 80 m are shown below.

14 s 12 s 15 s 17 s 12 s

What is his mean time?

Answer: 14 s

7. In a cricket match, the players in Jo's team scored the following numbers of runs.

2 3 9 10 12 3 5 7 19 20 31

What is the mean score?

Answer: 11

8. The amount of rainfall measured in Showerham on four separate days is shown below.

9 mm 12 mm 14 mm 13 mm

What is the mean rainfall?

Answer: 12 mm

/ 3

9. Katie and Vikram are competing in a darts competition. Their scores after 3 darts are written on the scoreboard.

What is the mean score with the six darts?

Answer: 21

Scoreboard			
Dart	1	2	3
Katie:	30	6	9
Vikram:	10	11	60

10. Which of these groups of five numbers has a mean of 10?
Circle the correct answer.

A 12, 14, 13, 11, 12

C 8, 27, 19, 17, 4

E 16, 4, 9, 7, 14

B 32, 20, 24, 29, 34

D 13, 9, 11, 5, 17

Verbal Reasoning – Rhyming synonyms

1. **SPEND**

First Lieutenant Williams looked for his _____ and marched towards the target.

- a) friend
- ☒ b) comrade
- c) rifle
- d) boots
- e) rucksack

2. **CAST**

Adela glanced at the _____ ocean with waves that crashed against steep, jagged rocks.

- a) blue
- b) choppy
- c) tranquil
- ☒ d) enormous
- e) rough

3. **SIR**

It was hard being left-handed, the fountain pen left an inky _____ on the paper when he wrote.

- a) line
- b) mark
- c) pattern
- d) stain
- ☒ e) smudge

4. **RAFFLE**

The many roundabouts and complicated junctions started to _____ Jonathan, as he drove through the city centre.

- a) annoy
- b) irritate
- ☒ c) perplex
- d) relax
- e) deter

5. **LEARN**

She took the glowing candle, being careful not to _____ her long hair.

- a) cut
- ☒ b) singe
- c) knot
- d) catch
- e) tangle

(emotion)

Elena observed the _____ from her bedroom window.

commotion

- ☐ catastrophe
- ☒ disturbance
- ☐ incident
- ☐ settlement
- ☐ landscape

(corrupt)

The _____ flurry of snow blanketed the garden.

abrupt

- ☐ picturesque
- ☒ sudden
- ☐ light
- ☐ delicate
- ☐ delightful

(doomed)

They _____ their picnic before going to swim in the lake.

consumed

- ☒ ate
- ☐ unpacked
- ☐ prepared
- ☐ admired
- ☐ savoured

(insistent)

The rainfall was _____ throughout their walk.

consistent

- ☐ refreshing
- ☐ severe
- ☐ moderate
- ☒ constant
- ☐ intolerable

Spelling

1. Every August, Edinburgh comes alive with a fresh vibreny as millions of people make their annual pilgrimige to its renouned arts festival. The diverse programe of events offers everything from exibitions and opera to music and comedy.

4. Desperate for a way out, Isaac attempted to pier into the darkness. He took a

A

B

C

D

N

5. deep breath and began to creep along the dingy coridor. With every step he

A

B

C

D

N

6. took, he could hear his heart pounding in his chest. He had known that coming

A

B

C

D

N

7. here was a terrible idea — he should never have listened to his brother. Frantically,

A

B

C

D

N

8. Isaac began searching for the door that would lead him out of this labrinth.

A

B

C

D

N

9. Suddenly, he froze. Pure terror coursed through his viens as he heard footsteps

A

B

C

D

N

10. in the distance. It had never ocurred to him that he might not be alone.

A

B

C

D

N

Punctuatuion

This passage contains some punctuation mistakes.
Write the passage out again with the correct punctuation.

2. Alicia — who had been volunteering at the gallery for three years—led the visitors through the doorway. She paused, as she gestured to a huge painting on the wall. “This painting was produced in Paris, in the sixteenth century,” she explained.

This passage contains some punctuation mistakes. Each numbered line has either one mistake or no mistake. For each line, work out which group of words contains a mistake, and circle the correct letter. Circle N if there is no mistake.

8. Last weekend my friends and I went camping. On Saturday morning, we filled the

A

B

C

D

N

9. car with everything we'd need: tents sleeping bags and food. When we finally got

A

B

C

D

N

10. to the camp site (the journey took five hours, it was raining and we were all grumpy.

A

B

C

D

N

11. "This is horrible! Its going to be a disastrous weekend," moaned my friend Harry.

A

B

C

D

N

12. Hurriedly, we began to assemble the tents. The instructions were ridiculously

A

B

C

D

N

13. complicated but on our seventh-attempt, we finally mastered it. Before long, the

A

B

C

D

N

14. downpour, had ended and we were sipping delicious mugs of hot chocolate.

A

B

C

D

N

15. This is more like it — I told you it'd be a brilliant weekend," grinned Harry.

A

B

C






D

N

Non-Verbal - 10 minute test

Each of the questions below has five figures.
Find which figure in each row is most unlike the others.

1.



a






b

c

d

e

2.



a

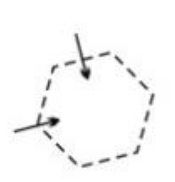
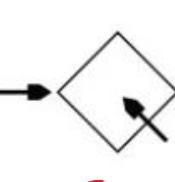
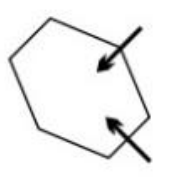
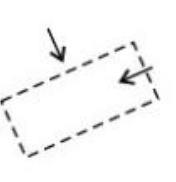
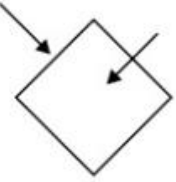
b

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e

3.



a


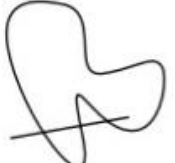
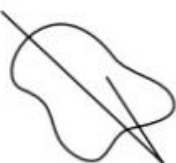


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4.



a



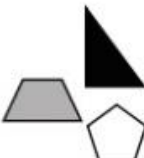


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d

e

5.



a

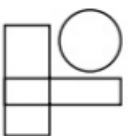
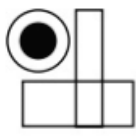
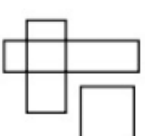
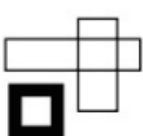


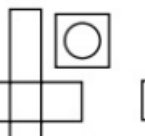
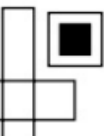
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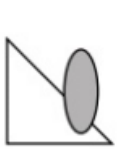
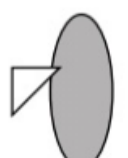


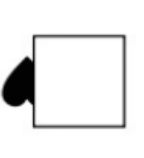

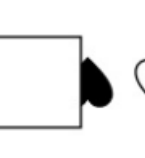

d

e









Each question has two shapes on the left with an arrow between them. The first shape is changed in some way to become the second. There is then a third shape followed by an arrow and a choice of five shapes. Choose the shape on the right that relates to the third shape like the second does to the first.

6.  →  :  →     







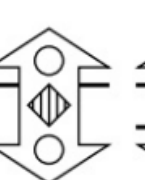

a b c d e

7.  →  :  →     



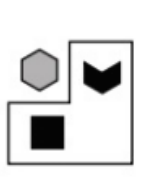
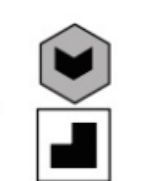




a b c d e

8.  →  :  →     

a b c d e

9.  →  :  →     

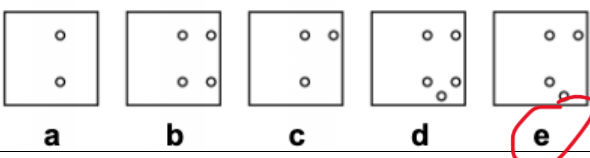
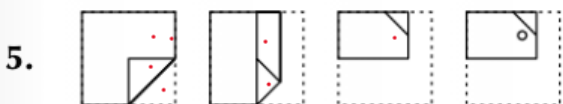
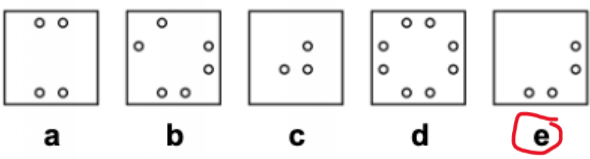
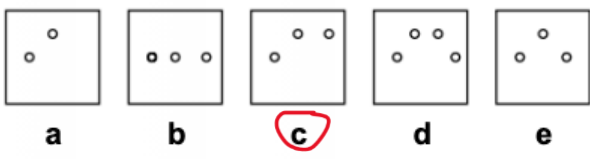
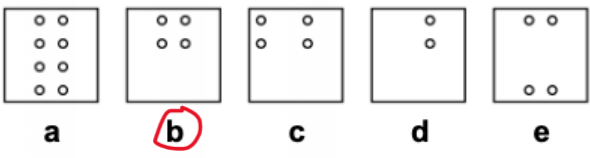
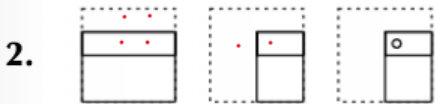
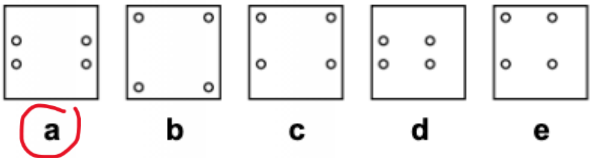
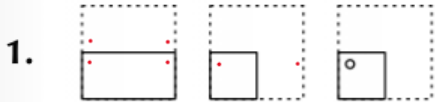
a b c d e

10.  →  :  →     

a b c d e

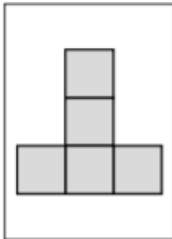
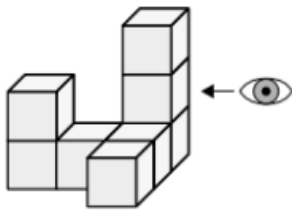
Spatial Reasoning – 10minute test

A square is folded and then a hole is punched, as shown on the left. Work out which option shows the square when unfolded.

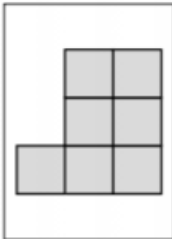


Work out which option is a 2D view from the **right** of the 3D figure shown.

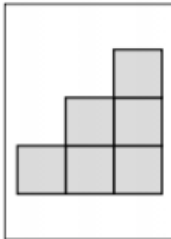
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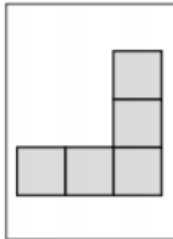
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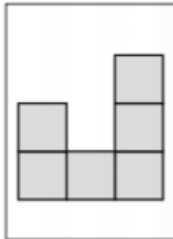
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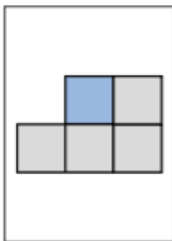
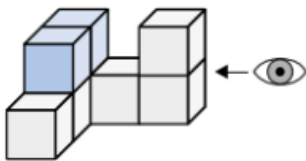


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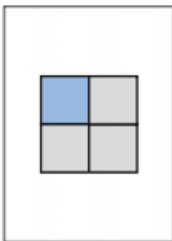


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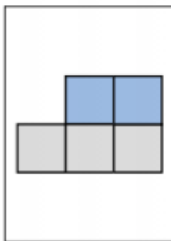
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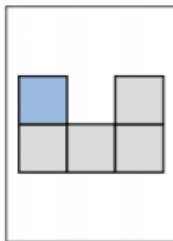
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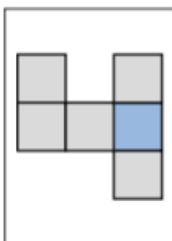
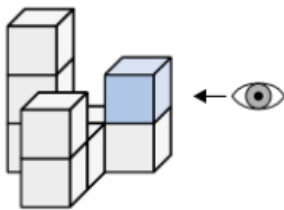


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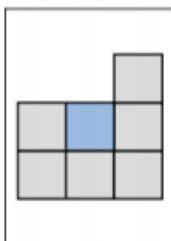
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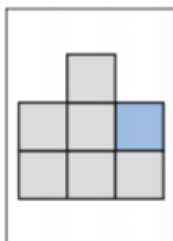
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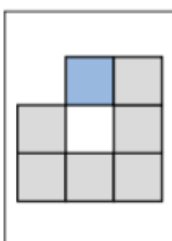
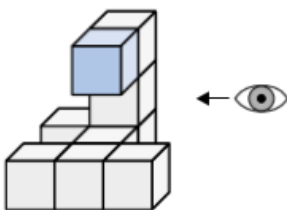


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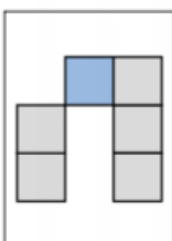


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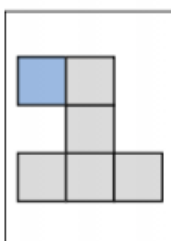
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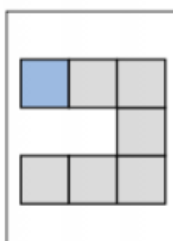
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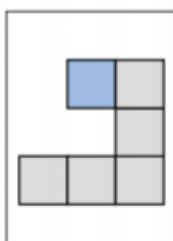
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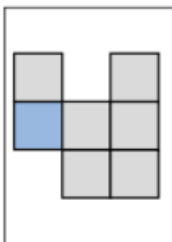
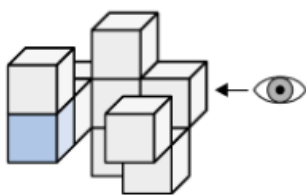


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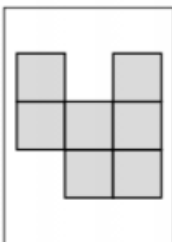


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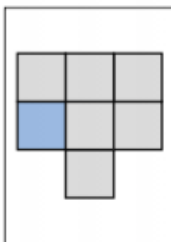
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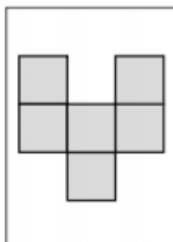
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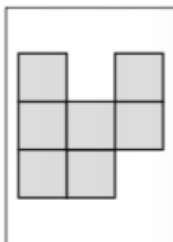
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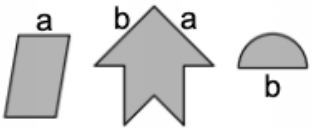
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e

Work out which option shows how the three shapes will look when they are joined by matching the sides with the same letter.

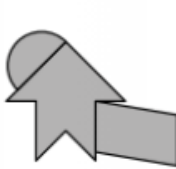
11.



a



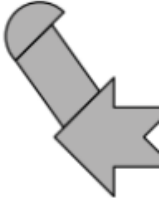
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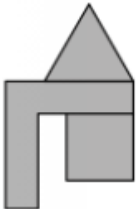
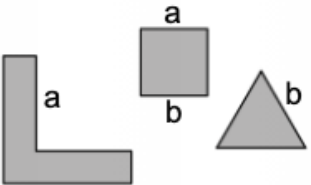


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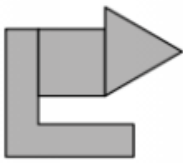


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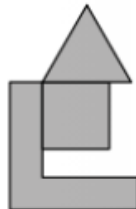
12.



a



b



c

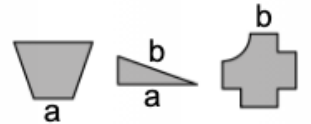


d



e

13.



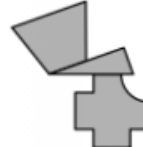
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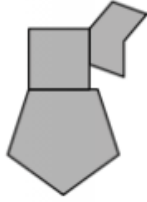
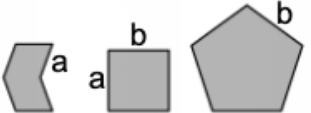


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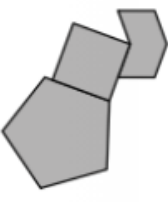
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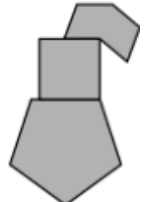
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c



d



e

An extract from 'Magnus Fin and the Selkie Secret'

by Janis Mackay

Waves high as houses reared, hovered then crashed, roaring onto the rocks. Salt spray spun through the air. Doors rattled. Chimneys moaned. Boats in the harbour were tossed high then flung low. The sea was a churning froth. Mighty waves smashed against cliff sides and hurled white spray high into the air. Magnus Fin was down at the beach watching, and yelling, and cheering. So was Tarkin, and they were both soaked to the skin.

Nearby, in the cottage down by the shore, Aquella sat in her room. With the window smeared with salt there wasn't much to see, but she could listen to the pounding, thundering roar of the angry sea. It thrilled and stirred her, but she was worried. Young seals could be dashed against the rocks. She hoped they'd keep away from the coast and stay deep. She kept away from the window, in case the storm shattered the glass and salt water landed on her delicate skin.

Magnus Fin and Tarkin, cheering from the safety of the heathery hillside, watched the sea fling scraps of rubbish onto the beach: plastic bottles, driftwood, branches, cans, ragged lengths of rope and unidentifiable flotsam and jetsam*.

"Might be treasure in among all that rubbish," Magnus Fin shouted. He had to shout to be heard above the roar of the sea. His practised eye scanned the coastline. He could see planks of wood. They'd make a good bonfire, or maybe a bench for inside the cave. He spied a wellington boot, a yellow rubber glove, bottles, a car tyre and something blue that looked like a mangled tent. No antiques from the *Titanic* though. No treasure chests from sunken pirate ships.

A wall of water advanced. The boys staggered backwards, yelling as the towering wave crashed over the stones, flinging a heap of sand and a dark object onto the shore. Fin just saw it before spray from the mighty wave cascaded up the beach, drenching them.

Tarkin grabbed Fin's arm, screaming, "We could get smashed against the rocks!" He spluttered up water. "We need to get out of here. Fast!"

*flotsam and jetsam — scattered items or ship parts found in the sea, often from shipwrecks

Question 1

According to the text, which of the following statements about the waves must be false?

- ☐ They move objects around.
 - ☒ They don't reach the cliffs.
 - ☐ They are as tall as buildings.
 - ☐ They scatter water droplets.
 - ☐ They make a lot of noise.
-

Question 2

According to the text, which of the following statements about Magnus Fin and Tarkin must be true?

- ☐ They are a long way from Aquella's cottage.
 - ☒ They are not wearing waterproof clothes.
 - ☐ They are watching the storm quietly.
 - ☐ They are standing on the harbour wall.
 - ☐ They find storms uninteresting.
-

Question 3

How does the storm make Aquella feel?

- ☐ Concerned and sad
 - ☐ Angry and nervous
 - ☐ Restless and brave
 - ☐ Relaxed and comforted
 - ☒ Excited and anxious
-

Question 4

According to the text, which of the following is a reason why Magnus Fin is watching the sea?

- ☐ He is concerned about the sea creatures.
 - ☐ He is worried that boats in the harbour will be damaged.
 - ☒ He thinks something valuable might wash up on the beach.
 - ☐ He is afraid that the nearby houses will be flooded.
 - ☐ He wants to gather driftwood for a bonfire.
-

Question 5

Which of the following is not mentioned as something that is dropped on the beach by the storm?

- ☐ Part of a vehicle
 - ☐ Plastic containers
 - ☒ Old furniture
 - ☐ Part of a tree
 - ☐ Footwear
-

Question 6

Why is Tarkin frightened at the end of the text?

- ☐ He can't keep his balance on the wet sand.
 - ☐ The waves are sweeping him out to sea.
 - ☐ The waves have knocked him over.
 - ☐ He doesn't know how to swim.
 - ☒ The waves are getting closer to him.
-

Question 7

What does 'reared' mean in this extract from the text: "Waves high as houses reared, hovered then crashed"?

- ☒ Rose
 - ☐ Froze
 - ☐ Deepened
 - ☐ Broke
 - ☐ Rushed
-

Question 8

What does 'practised' mean in this extract from the text: "His practised eye scanned the coastline"?

- ☐ Committed
 - ☐ Steady
 - ☐ Disciplined
 - ☐ Practical
 - ☒ Experienced
-

Question 9

What technique is used in this extract from the text: "Salt spray spun through the air"?

- ☐ Exaggeration
 - ☒ Alliteration
 - ☐ Personification
 - ☐ Onomatopoeia
 - ☐ A metaphor
-

Question 10

What type of word is 'sunken' in this extract from the text: "No treasure chests from sunken pirate ships"?

- ☐ Verb
 - ☐ Determiner
 - ☐ Preposition
 - ☒ Adjective
 - ☐ Adverb
-