

National Reading Tests

READING

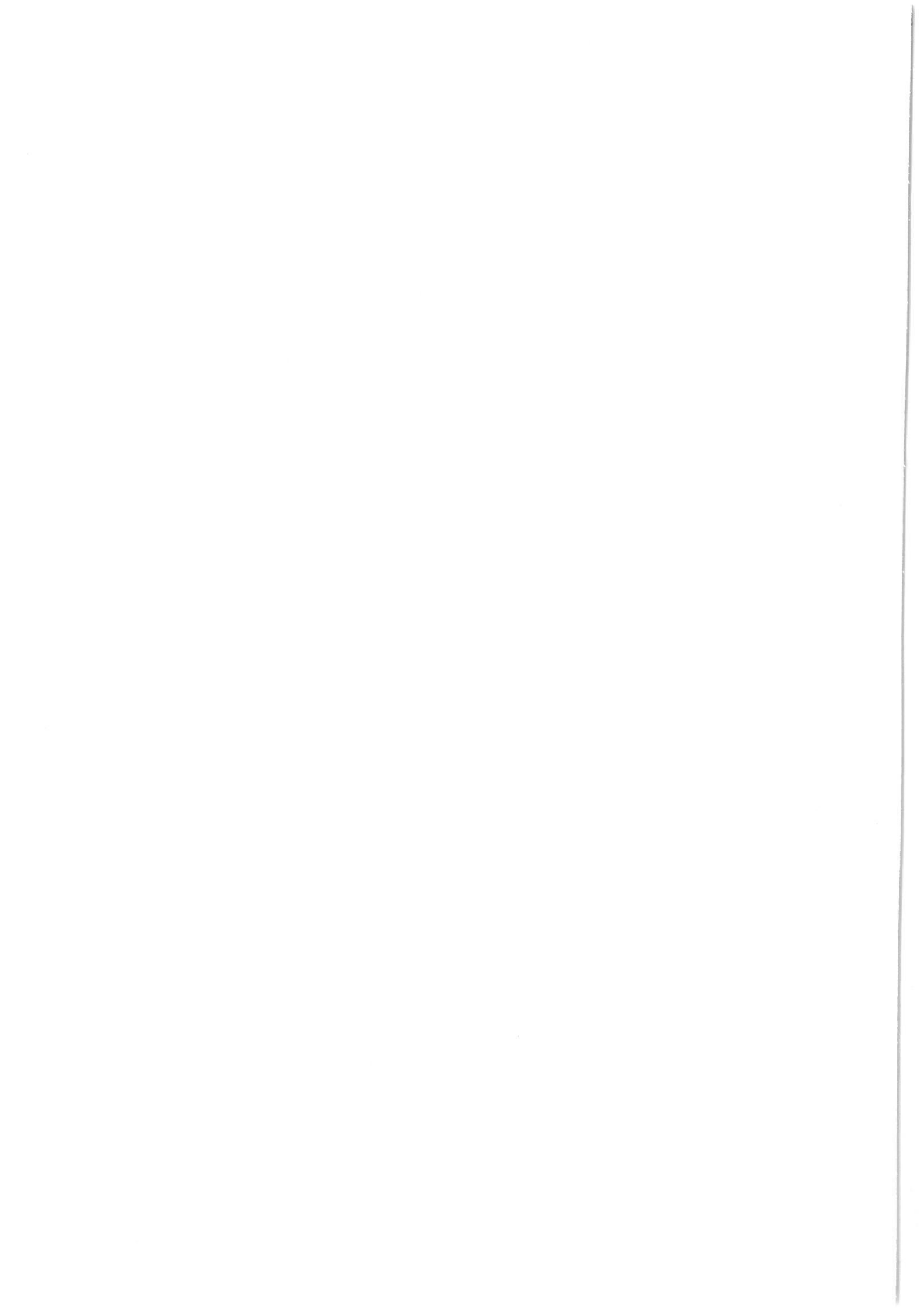
Markscheme ED4



139088



Llywodraeth Cymru
Welsh Government



Contents

General marking rules	4
Marking the modified tests	4
Specific guidance on 'find and copy' and 'underline' questions	5
After marking	5
Marking guidance pages	6
<i>A whale of an appetite</i> : Questions 1–9	6
<i>The descent into darkness</i> : Questions 1–11	8
<i>Agile robots</i> : Questions 1–11	10

General marking rules

- Ensure that all mark boxes are completed.
- Only answers given as correct in the markscheme should be accepted.
- If a learner has given more than one response, the answer should be marked as incorrect.
- If a learner has changed an answer, a mark should be given for the intended answer if it is clear and correct.
- The majority of questions are worth 1 mark, but the range of marks for each question is given in the markscheme. The number of marks available also appears below the mark box in the learners' booklets. Please ensure that the mark awarded does not exceed the maximum number of marks available.
- Incorrect or unacceptable answers are given a mark of 0. No half marks are awarded.
- Spelling or transcription errors should not be penalised.
- Having marked all questions on each double-page spread, record the total number of marks awarded in the 'total' box in the bottom right-hand corner. Check that the mark recorded does not exceed the maximum number of marks available.
- Markers should record their initials on the cover of the test booklet to assist quality assurance.

Marking the modified tests

For learners using the modified large print or Braille test materials, some questions have been adapted or replaced. When marking a modified large print or Braille test, please use this markscheme alongside the adapted markscheme which is included in the *Notes for teachers* that accompany the modified tests.

Specific guidance on ‘find and copy’ and ‘underline’ questions

- For questions which require learners to ‘find and copy’ or ‘underline’ a response, the minimum acceptable answer is given in the markscheme. On some occasions additional words may appear in brackets. Words that appear in brackets are allowable, but not essential. For example:

Award **1 mark** for:

- (He went to) school.

The minimum acceptable answer is ‘school’ but the response could also include any or all of the words in brackets and still be marked as correct. The inclusion of any additional words would result in the award of 0 marks. Learners who include additional words in their answer have been insufficiently precise.

2 mark ‘find and copy’ or ‘underline’ questions

- If a question asks learners to find two words/phrases and the learner only supplies one correct response, award 1 mark (see individual questions for further guidance).
- Sometimes learners may write more than is asked for in the question, in addition to writing the correct responses.
 - If a learner gives one more response than is asked for, award 1 mark.
 - If a learner gives two or more responses, in addition to what is asked for, award 0 marks.

For example:

Award **1 mark** for each of the following, up to a maximum of **2 marks**:

- cat
- dog.

If a learner writes *cat, dog, fish* they would get 1 mark.

If a learner writes *cat, hamster, dog, budgie* they would get 0 marks.

These are the marking conventions that were applied when marking the tests at finalisation. For this reason, it is **vital** that they are applied to your own marking in order for the standardised scores to be valid.

After marking

Add up the total number of marks awarded. This is the total score and should be recorded on the cover of the test booklet and input onto the relevant mark sheet on the school’s Management Information System, together with the details and date of the test taken.

This data should then be submitted as part of the Welsh National Tests Data Collection (WNTDC). Further details are available from the *National Reading and Numeracy Tests – Test administration handbook 2016* on the Learning Wales website and in *Welsh National Tests Data Collection and reporting arrangements 2015/16* available on the Welsh Government website.

Marking guidance pages

A whale of an appetite: Questions 1–9

1 Look at the question box at the start of the text.

- a) Why is the answer unexpected?
because the reader might expect that ...
- it would be unlikely to find grapefruits in the ocean
such a large creature would swallow larger items of food
a whale's diet would consist entirely of meat
a whale would need more than a grapefruit to satisfy its hunger

Tick one.

- b) What is the purpose of this question box?
- to provoke debate about the topic
to assess the reader's knowledge
to stir the reader's curiosity
to summarise the key idea

a) Award 1 mark for:
• such a large creature would swallow larger items of food. (1 mark)

b) Award 1 mark for:
• to stir the readers' curiosity. (1 mark)

4 ...which slip down a treat.

Why has this phrase been included?

- It fits with the informal tone of the text.
It shows how hard it is to trap the krill.
It shows that krill are a special treat for blue whales.
It highlights the writer's scientific expertise.
It illustrates how easily blue whales eat krill.

Tick two.

Award 1 mark for both answers ticked:

- It fits with the informal tone of the text.
- It illustrates how easily blue whales eat krill. (1 mark)

5 Number these events from 1 to 5 to show the order in which they happen when a blue whale eats.

- The whale takes in water and krill. **2**
The krill are swallowed. **5**
The whale pushes out the water. **3**
The whale widens its mouth. **1**
The krill are captured in the baleen. **4**

Award 1 mark for:

- 2
5
3
1
4

(1 mark)

8 Put ticks to show which statements are true and which are false.

	True	False
A blue whale's ear drum is larger than its belly button.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blue whales store food in their cheeks to survive through winter.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The baleen acts as a filter to separate water from food.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A blue whale is larger than a sperm whale in every way.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
A sperm whale cannot swallow a man.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Whales can hear human conversations from the other side of the world.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Award 2 marks for all six rows completed correctly.

Award 1 mark for any five rows completed correctly. (2 marks)

9 Put ticks to show which statements are fact and which are opinion.

	Fact	Opinion
It is amazing that such a huge animal can only swallow small things.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Blue whales must feel really hungry during the winter.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
There is no known creature bigger than the blue whale.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A blue whale is a magnificent creature.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Award 1 mark for all four rows completed correctly.

(1 mark)

2 Put ticks to show whether the following are used to illustrate the **weight** or the **size** of different features of the blue whale.

	Used to illustrate	
	weight	size
100 people		✓
dinosaur		✓
2,700 people	✓	
elephant	✓	
family car		✓

Award 1 mark for all five rows completed correctly.
(1 mark)

3 The writer refers to the fact that the reader might already know something about the diets of blue whales.

Find and copy the phrase that shows this.

Award 1 mark for:

- (As) you may have learned (in science lessons).

Also accept:

- What's the biggest thing a blue whale could swallow?

(1 mark)

6

The baleen is compared to teeth, bristles and a comb.

Put ticks to show whether the following aspects of the baleen best support the comparison to **teeth**, **bristles** or a **comb**.

	Teeth	Bristles	Comb
the location of the baleen in the mouth	✓		
the texture of the baleen		✓	
the function of filtering or separating things			✓
the role of the baleen to enable feeding	✓		

Award 1 mark for all four rows completed correctly.
(1 mark)

7

Find and copy the phrase that shows that James Bartley's story has been disproved.

Award 1 mark for:

- (but this has been) nailed as a fraud(!)

Also accept:

- fraud
- (once inside, the intense acidity of the sperm whale's stomach juices would make survival) impossible.

(1 mark)

The descent into darkness: Questions 1–11

Page 9

1 The tunnel was not as dark as Fin had first thought.
 What does this show?
 He had taken a different tunnel to the one he had expected.
 He could see the light at the end of the tunnel.
 He wished he had taken a darker tunnel.
 He was able to see more than he had expected.

Tick one.

Award 1 mark for:

- He was able to see more than he had expected. (1 mark)

Page 10

5 What reason does the writer suggest for Fin choosing the darker tunnel?
 He was not afraid of the dark.
 He wanted to frighten his pursuer.
 He knew the tunnels well.
 He had planned his escape route.
 He felt more protected in the dark.

Tick one.

Award 1 mark for:

- He felt more protected in the dark. (1 mark)

Page 11

9 ...there was no way out of here.
 What does this show?
 Fin had checked and knew for sure that he was trapped.
 Fin was in despair and was seeing the worst in the situation.
 Fin had recognised where he was so knew that there was no escape.
 Fin was certain his pursuer was definitely going to find him now.

Tick one.

Award 1 mark for:

- Fin was in despair and was seeing the worst in the situation. (1 mark)

10 Fin worried about some things that might happen to him in the tunnel but not others. Put ticks to show which of the following were Fin's worries, Fin's actual experiences or both.

	Fin's worries	Fin's actual experiences	Both
being caught by his pursuer	✓		
leading his pursuer into the dark		✓	
being seen in the dark tunnel by his pursuer	✓		
falling in the dark			✓
running into something solid	✓		
dying down in the tunnels	✓		

Award 2 marks for all six rows completed correctly.
Award 1 mark for any five rows completed correctly. (2 marks)

6 ...some primitive instinct...
 What does this suggest about Fin's decision?
 He made an immature choice.
 He was driven by the need to survive.
 He left the decision to fate.
 He made the decision without thinking.
 He took the first option he saw.
 He was confident he had made the right decision.

Tick two.

Award 1 mark for both answers ticked:

- He was driven by the need to survive.
- He made the decision without thinking. (1 mark)

2 At the beginning of the text, what was Fin most worried about?
 that his pursuer would hear his loud breathing
 that he would get lost in the tunnels
 that he could not maintain his speed
 that his lungs would collapse
 that his pursuer would see him
 that he would fall over in the dark

Tick one.

Award 1 mark for:

- that he could not maintain his speed. (1 mark)

3 Look at the first paragraph.
...loud in his ears...

What does this tell us?

Fin was very conscious of how loud his breathing seemed.
Fin's breathing drowned out all other sounds inside the tunnel.
The sound echoed all around the quiet, empty tunnel.
It felt like the pursuer was breathing down Fin's neck.

Tick one.

Award 1 mark for:

- Fin was very conscious of how loud his breathing seemed.

(1 mark)

4

Look at the first paragraph.
Find and copy two words that give a sense of being confined.

1. _____
2. _____

Award 1 mark for identifying both of the following:

- narrowing
- shrinking.

(1 mark)

7

Fin did not use his flashlight.
Why?

He did not want his pursuer to see where he was.
He was afraid of what he might see in the tunnel.
He was in too much of a panic to think clearly.
He trusted his instincts to find his way.
He could see well enough without it.

Tick one.

Award 1 mark for:

- He did not want his pursuer to see where he was.

(1 mark)

8

Find and copy three physical symptoms that demonstrate Fin's fear.

1. _____
2. _____
3. _____

Award 2 marks for identifying all three of the following.
Award 1 mark for identifying any two of the following:

- (he was) drenched in) cold sweat
- (his) heart hammering (fit to burst)
- panting (with shock).

Do not accept:

- (there were) aches and doubtless bruises.

(2 marks)

11

In the last paragraph the writer describes how Fin was feeling.
What does the use of short questions show?

Fin had accepted that he needed help.
Fin was feeling confused and scared.
Fin was trying to plan his route out.
Fin was relieved to have found a solution to his problem.

Tick one.

Award 1 mark for:

- Fin was feeling confused and scared.

(1 mark)

1 Find and copy **two** non-emergency situations the new robots could be used in.

1. _____
2. _____

Award 1 mark for identifying any two of the following:

- routine and/or jobs
- everyday and/or tasks
- (doing) chores.

Also accept:

- helping (elderly/physically disabled people).

Do not accept:

- (emergency) rescue operations.

(1 mark)

2 Look at the second paragraph.

What does it tell us?

It is impossible to recreate walking in robots with motorised limbs.
Walking requires the use of complex electronic mechanisms.
Scientists do not fully understand the physical process of walking.
Walking is more complex than we might think.

Award 1 mark for:

- Walking is more complex than we might think.

(1 mark)

5 How do these new robots overcome the problem of walking across unstable ground?

They detect obstacles in their path and plan a route around them.
They measure their stride length to keep up a regular pace.
They recognise changes in the terrain and adapt to them.
They avoid walking across uneven ground surfaces.
They calculate the distance that they need to cover.

Tick one.

Award 1 mark for:

- They recognise changes in the terrain and adapt to them.

(1 mark)

6

Robots respond automatically to their environment.

Which word describes the equivalent response in humans?

Tick one.
dynamically hydraulically briskly
continually steadily instinctively

Award 1 mark for:

- instinctively.

(1 mark)

9 Put ticks to show which statements are **fact** and which are **opinion**.

	Fact	Opinion
Some robots can run over flat ground.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Before Atlas, robots were not very useful.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Newer robots are less likely to fall over than older ones.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
It is essential to develop robots for emergency rescues.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dynamic balance technology is amazing.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Humanoid robots are of little practical value.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Award 2 marks for all six rows completed correctly.

Award 1 mark for any five rows completed correctly.
(2 marks)

10 What are the **main** purposes of this text?

Tick two.
to highlight the dangers of working in robotics.
to illustrate the potential benefits of these new robots
to describe how robots do jobs currently done by humans
to explain in detail how the robots function
to report the latest developments in robotics
to promote the use of robots in the home and workplace

Award 1 mark for both answers ticked:

- to illustrate the potential benefits of these new robots
- to report the latest developments in robotics.

(1 mark)

3 No wonder then that, until now, robots have not been very good at it.

What idea is conveyed by this sentence?

It is not surprising that....

Tick one.

- robots can do calculations as well as humans.
- walking robots have been developed.
- it has taken this long to create walking robots.
- robots can react as quickly as humans.

Award 1 mark for:

- it has taken this long to create walking robots. (1 mark)

4 What is the function of the boxed text?

Tick one.

- It provides additional but unrelated information.
- It highlights the key points covered in the article.
- It describes how the robots will be further developed.
- It explains the difficulties that scientists are yet to overcome.

Award 1 mark for:

- It highlights the key points covered in the article. (1 mark)

7 Look at the sections about Atlas.

Put ticks to show which statements show what Atlas can do now and what features are predicted for future robots.

	Atlas can do now	Predicted for future robots
run on uneven ground		<input checked="" type="checkbox"/>
use dynamic balance	<input checked="" type="checkbox"/>	
work efficiently in dangerous environments		<input checked="" type="checkbox"/>
work safely around humans		<input checked="" type="checkbox"/>
walk briskly on a treadmill	<input checked="" type="checkbox"/>	
stay balanced when pushed	<input checked="" type="checkbox"/>	

Award 2 marks for all six rows completed correctly.

Award 1 mark for any five rows completed correctly. (2 marks)

8 Which statement best reflects Marc Raibert's opinion?

Tick one.

- We are on the verge of creating robots that are as skilled as humans.
- Atlas is the closest we will get to creating a human-like robot.
- We should not try to make robots any more human-like than Atlas.
- Further development is needed to be able to build robots as skilled as humans.

Award 1 mark for:

- Further development is needed to be able to build robots as skilled as humans. (1 mark)

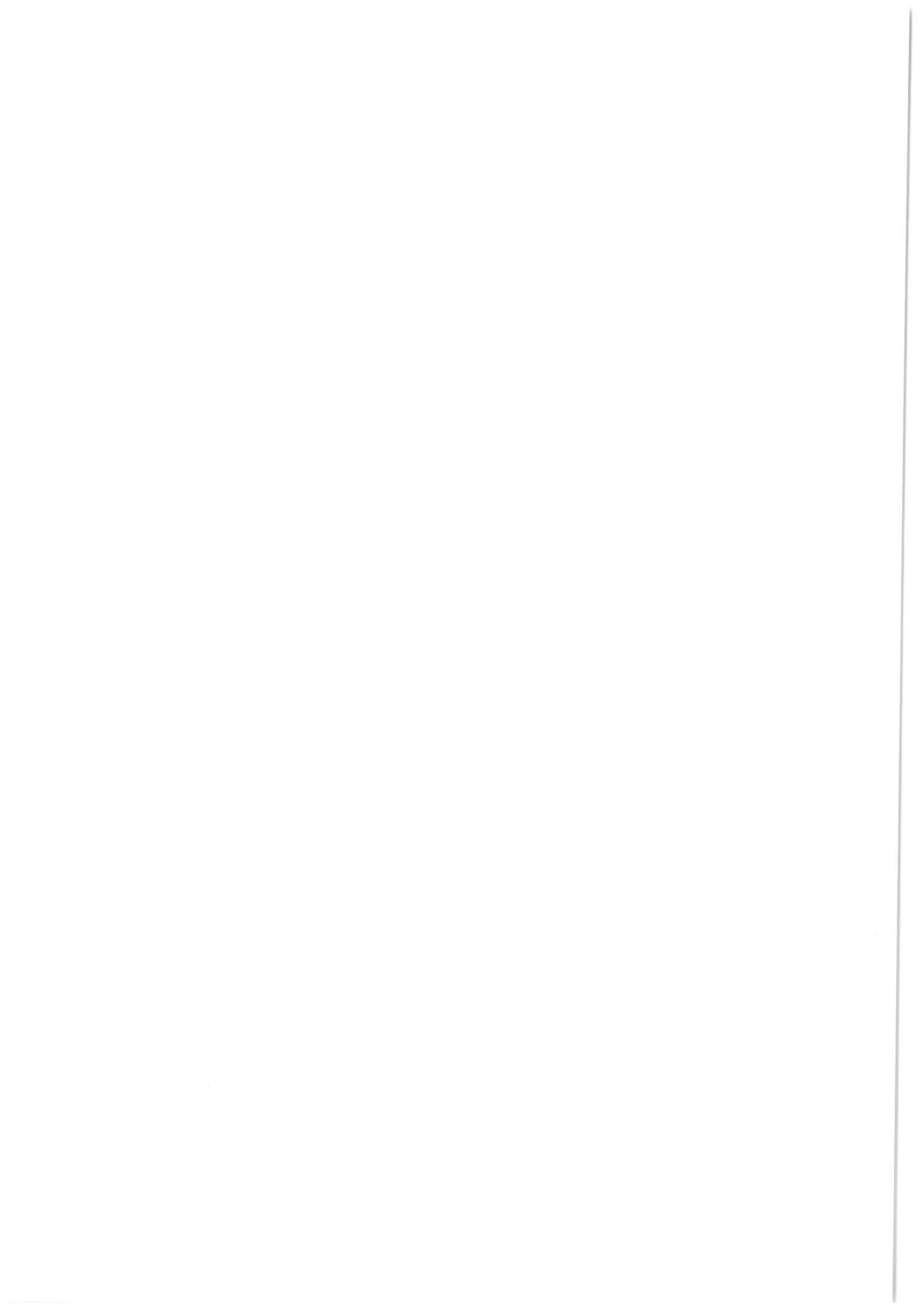
11 Which is the most appropriate headline for this article?

Tick one.

- Unstable robot disaster!
- Emergency rescue services saved by robots
- First robot to pass office job interview
- In the robotics race, Atlas is the one to beat
- Robots on brink of meltdown!

Award 1 mark for:

- In the robotics race, Atlas is the one to beat. (1 mark)



Acknowledgements

'A whale of an appetite' adapted from
The QI Book of General Ignorance (Pocket Edition) by John Lloyd and John Mitchinson
(Faber and Faber Limited, 2008)

and

'Fun Facts About Blue Whales' from Blue Whale Project
<https://sites.google.com/site/bluewhaleproject/Home/fun-facts-about-the-project>

'The descent into darkness' taken from *The Reckoning* by James Jauncey (Young Picador, 2008)

'Agile robots' taken from

'Agile Robots' by Will Knight in *MIT Technology Review* (2014)
www.technologyreview.com/featuredstory/526536/agile-robots

Extracts from these texts have been incorporated into this markscheme solely for the purposes of the examination in accordance with Section 32(3) of the Copyright, Designs and Patents Act 1988. No copyright clearance for any other use has been obtained or sought.