

Holiday Challenge: Reading '10 Challenges for 10 Days'

This booklet is designed to keep your brains 'ticking over' during the holidays. Just a few short activities will mean that you return to school ready and raring to go! Try to really impress your teacher by completing them all, one per day. Circle any questions that you'd like some more help with when term starts again.

Commissioned by The PiXL Club Ltd.

This resource is strictly for the use of member schools for as long as they remain members of The PiXL Club. It may not be copied, sold nor transferred to a third party or used by the school after membership ceases. Until such time it may be freely used within the member school.
All opinions and contributions are those of the authors. The contents of this resource are not connected with nor endorsed by any other company, organisation or institution.

© Copyright The PiXL Club Limited

Reading – Day 1

Hard-boiled changes

Some changes are reversible: the material can return to its original state. Some, however, are irreversible and no matter what happens to it, the substance cannot go back to how it was. These different sorts of changes can be seen time and time again in the kitchen. Melting chocolate, for instance, is a reversible change because, when the heat is removed, it will return to a solid state. That does not mean it regains its original shape; a suitable mould is required for that.

A good example of an irreversible change can be observed when an egg is cooked. Before heating, the protein molecules in albumen (egg white) are free to move around within the water that constitutes ninety percent of it. That's because they are curled up and not attached to each other. Cooking causes these individual molecules to unfurl, enabling them to form firm bonds with others. As a result, the material stiffens and becomes the opaque, white matter we are all familiar with. This process usually completes at around sixty-five degrees centigrade. The yellow yolk which, unlike albumen, contains fat and carbohydrates as well as protein, will follow a similar pattern when heated. So, how do you think it is possible to boil eggs that have a firm albumen but a runny yolk?

Day 1

1. '... the material can return to its original state.' Explain the meaning of the word **original** in this sentence.

_____ 1 mark

2. Which words most closely match the meaning of **constitutes**? Tick **one**.

warms up	<input type="checkbox"/>	dries up	<input type="checkbox"/>	
makes up	<input type="checkbox"/>	mixes up	<input type="checkbox"/>	1 mark

3. Where in the home can reversible and irreversible changes be seen 'time and time again'?

_____ 1 mark

4. Which word or phrase most closely matches the meaning of the word **opaque**? Circle **one**.

not transparent not solid yellowy runny

5. At what temperature does albumen usually finish changing?

_____ 1 mark

Reading – Day 2

Hard-boiled changes

Some changes are reversible: the material can return to its original state. Some, however, are irreversible and no matter what happens to it, the substance cannot go back to how it was. These different sorts of changes can be seen time and time again in the kitchen. Melting chocolate, for instance, is a reversible change because, when the heat is removed, it will return to a solid state. That does not mean it regains its original shape; a suitable mould is required for that.

A good example of an irreversible change can be observed when an egg is cooked. Before heating, the protein molecules in albumen (egg white) are free to move around within the water that constitutes ninety percent of it. That's because they are curled up and not attached to each other. Cooking causes these individual molecules to unfurl, enabling them to form firm bonds with others. As a result, the material stiffens and becomes the opaque, white matter we are all familiar with. This process usually completes at around sixty-five degrees centigrade. The yellow yolk which, unlike albumen, contains fat and carbohydrates as well as protein, will follow a similar pattern when heated. So, how do you think it is possible to boil eggs that have a firm albumen but a runny yolk?

Day 2

1. In paragraph two, which word is used to describe the way the molecules change from being curled up to becoming straighter?

_____ 1 mark

2. What is albumen?

_____ 1 mark

3. What do the protein molecules do that makes the albumen become stiff?

_____ 2 marks

4. Name two differences between albumen and yolk.

_____ 2 marks

5. Using information from the whole text, tick one box in each row to show whether each statement is true or false.

	True	False
You only see irreversible changes in the kitchen.		
Heat makes the protein molecules straighten up.		
Albumen contains protein, fat and carbohydrates.		

2 marks

Reading – Day 3

Hadrian’s Wall

Hadrian’s Wall is one of the most striking legacies of Roman life in Britain. Even though construction started in 122C.E., large sections of it can still be seen nearly 1900 years later. Some people believe that it was built to form a barrier between England and Scotland, but they are mistaken. For a start, Scotland did not exist back then. Anyway, its entire length is located firmly within what we now call England and it has never marked the border between these two countries.

No, the real motive behind the building of the wall is not fully clear. Historical records suggest that the official reason was to protect the Roman Empire from aggressive ‘barbarians’ from the north. Indeed, there is some evidence that the emperor Hadrian felt he was following a ‘divine instruction’, although it is not clear which of the Roman gods inspired him. The reality might be rather different, however. After all, walls rarely offer an effective barrier to invasion. It might have been a simple expression of the power of Rome. It might even have been partly intended to improve tax collection. If so, it could be that money was a powerful motive, but the country’s rulers didn’t like to admit as much out loud. How little things have changed!

Day 3

1. In what year did the Romans start building Hadrian’s Wall?

_____ 1 mark

2. Which word or phrase most closely matches the meaning of **legacies**? Tick **one**.

historical books ruins
 lasting examples soldiers 1 mark

3. Some people believe the wall was built to form a barrier between which **two** countries?

_____ 1 mark

4. **Find** and **copy** the adjective that describes the ‘**barbarians**’.

_____ 1 mark

5. Which word or phrase most closely matches the meaning of ‘**motive**’? Circle **one**.

excuse reason money countryside 1 mark

Reading – Day 4

Hadrian's Wall

Hadrian's Wall is one of the most striking legacies of Roman life in Britain. Even though construction started in 122C.E., large sections of it can still be seen nearly 1900 years later. Some people believe that it was built to form a barrier between England and Scotland, but they are mistaken. For a start, Scotland did not exist back then. Anyway, its entire length is located firmly within what we now call England and it has never marked the border between these two countries.

No, the real motive behind the building of the wall is not fully clear. Historical records suggest that the official reason was to protect the Roman Empire from aggressive 'barbarians' from the north. Indeed, there is some evidence that the emperor Hadrian felt he was following a 'divine instruction', although it is not clear which of the Roman gods inspired him. The reality might be rather different, however. After all, walls rarely offer an effective barrier to invasion. It might have been a simple expression of the power of Rome. It might even have been partly intended to improve tax collection. If so, it could be that money was a powerful motive, but the country's rulers didn't like to admit as much out loud. How little things have changed!

Day 4

1. Explain what '**divine instruction**' means? Use evidence from the text to support your answer.

_____ *2 marks*

2. **Find** and **copy** the phrase that suggests that the wall might not have been a successful way of protecting the Romans.

_____ *1 mark*

3. 'It might have been a simple expression of the power of Rome.' What do you think '**expression of power**' means?

_____ *1 mark*

4. Write down **two** real reasons, suggested in the article, as to why the wall was built.

a) _____

b) _____ *2 marks*

5. What phrase suggests that the Romans were not the only people who avoided admitting '**out loud**' that they wanted to collect taxes?

_____ *1 mark*

Reading – Day 5

Rock, Paper, Scissors ... Water

No doubt, you are familiar with the game Rock, Paper, Scissors. Rock blunts Scissors, Scissors cut Paper and Paper wraps up the Rock, and so on. But what would happen if you added another element – water? You might think of water as something beneficial – essential for life. You might enjoy swimming, paddling in the surf, or relaxing in a soothing, warm bath. But water can also have a fearsomely destructive power, as any visit to Britain’s wonderfully varied coastline will prove.

Whether it’s the craggy cliffs of the south west or the wide, marshy estuaries of East Anglia, the earth-moving effects of the sea are all too apparent. The daily battering of the shore means that our coastline is constantly changing, thanks to erosion. Waves crash onto the land, picking up stones and hurling them at the base of the cliffs. Over time, this wears away the rock in a process called undercutting. The cliff face above becomes unstable and a section sheers off and tumbles onto the beach below. In short, solid stone is defeated by a mere liquid. So next time you play Rock, Paper, Scissors, remember that water would trump them all, eventually – it might just make for a rather long game.

Day 5

1. **Find** and **copy** the word that tells you how Rock beats Scissors.

_____ 1 mark

2. Name **two** of the benefits of water given in this article.

a) _____

b) _____ 2 marks

3. How does the article describe the power of water? **Find** and **copy both** words.

_____ 1 mark

4. Which word is closest in meaning to **apparent**?

violent risky

solid obvious

5. What happens during **undercutting**?

_____ 1 mark

Reading – Day 7

The Raiders

Heavy skies, heavy heart. Edmund perched on the mossy bank, sullenly tossing pebbles into the stinking, grey-green mire of the estuary. Searching fingers of water snaked over the mudflats towards him. The tide was edging in, mimicking his rising anxiety. Soon he would have to return to the monastery to confront his fate. Somehow, he didn't think that the monks would show him the same mercy they expected from their god.

As he rose to leave, his eye was caught by something fluttering over the reed beds. Then there was another and another – multicoloured flags moving in smooth, ominous procession. Edmund stood transfixed as a dragon's head appeared at the bend in the river. Soon, the full horror was revealed: a long-ship was gliding silently upstream, propelled by well-trained oars that barely raised a ripple. It was not alone: three ... four ... five ... Edmund counted six in total – a formidable raiding party of warriors from the North. Now it really was time to return to the monastery. Fast.

Day 7

1. Find **two** ways in which the author suggests that Edmund is feeling troubled about something.

a) _____

b) _____ *1 mark*

2. Which word is closest in meaning to **mire**?

mud boat

misery clouds

3. In what way was the tide like his anxiety?

_____ *1 mark*

4. How do we know that Edmund is worried about going back to the monastery? Use evidence from the text to support your answer.

_____ *2 marks*

5. **Find and copy** the word that says what the monks '**expected from their god**'.

_____ *1 mark*

Reading – Day 8

The Raiders

Heavy skies, heavy heart. Edmund perched on the mossy bank, sullenly tossing pebbles into the stinking, grey-green mire of the estuary. Searching fingers of water snaked over the mudflats towards him. The tide was edging in, mimicking his rising anxiety. Soon he would have to return to the monastery to confront his fate. Somehow, he didn't think that the monks would show him the same mercy they expected from their god.

As he rose to leave, his eye was caught by something fluttering over the reed beds. Then there was another and another – multicoloured flags moving in smooth, ominous procession. Edmund stood transfixed as a dragon's head appeared at the bend in the river. Soon, the full horror was revealed: a long-ship was gliding silently upstream, propelled by well-trained oars that barely raised a ripple. It was not alone: three ... four ... five ... Edmund counted six in total – a formidable raiding party of warriors from the North. Now it really was time to return to the monastery. Fast.

Day 8

1. Which word is closest in meaning to **ominous**? Tick **one**.

tall	<input type="checkbox"/>	threatening	<input type="checkbox"/>
slow-moving	<input type="checkbox"/>	colourful	<input type="checkbox"/>

2. Was there a real dragon? How do you know?

_____ *2 marks*

3. What showed that the oars were '**well-trained**'?

_____ *1 mark*

4. What did Edmund think might happen that made him want to return to the monastery?

_____ *1 mark*

5. How do you think Edmund's mood changed from the beginning of the extract to the end? Explain your answer with evidence from the text.

_____ *3 marks*

Reading – Day 9

The Scurrier

Grey clouds drag themselves across the sky.
Drooping giants shuffle off their copper cloaks
And leave them crumpled at their feet.
The year is getting tired.

The scurrier gathers memories of summer -
Seeds, nuts -
And buries them beneath her bedchamber.
A straw nest is prepared
with crisp sheets of orange and brown.
Dreams are calling.

Six moons in a single sleep.
Streams stand still and silent.
A soft white blanket is gently lain,
Tucked in along the hedgerows,
Until, by morning's magic, the spell is broken.
Time to rise.

Day 9

1. **Find** and **copy** the word that describes how the clouds move across the sky.

_____ 1 mark

2. What do you think the '**drooping giants**' are?

_____ 1 mark

3. What is meant by '**copper cloaks**'?

_____ 1 mark

4. Which word best describes the theme of the first verse?

joy	<input type="checkbox"/>	waiting	<input type="checkbox"/>
weather	<input type="checkbox"/>	tiredness	<input type="checkbox"/>

5. What might a '**scurrier**' be?

_____ 1 mark

Reading – Day 10

The Scurrier

Grey clouds drag themselves across the sky.
Drooping giants shuffle off their copper cloaks
And leave them crumpled at their feet.
The year is getting tired.

The scurrier gathers memories of summer -
Seeds, nuts -
And buries them beneath her bedchamber.
A straw nest is prepared
with crisp sheets of orange and brown.
Dreams are calling.

Six moons in a single sleep.
Streams stand still and silent.
A soft, white blanket is gently lain,
Tucked in along the hedgerows,
Until, by morning's magic, the spell is broken.
Time to rise.

Day 10

1. Why are seeds and nuts described as '**memories of summer**'?

_____ 1 mark

2. Explain the play on words which the author includes in the following lines:

**'Seeds, nuts –
And buries them beneath her bedchamber.'**

_____ 1 mark

3. What is meant by '**six moons in a single sleep**'?

_____ 1 mark

4. What is being described with the metaphor '**soft, white blanket**' and how does the phrase '**tucked in**' support this impression?

_____ 2 marks

5. How does the last line of each verse contribute to the overall theme of the whole poem?

_____ 3 marks