**Reading extract and questions:**

**Year 4**

**The Water Cycle**

**Set A/B**

When you hear about *the water cycle*, do you imagine some kind of bike that travels on water? This would make sense but the water cycle actually describes how water moves through the Earth’s surface, atmosphere and below ground. This is a process that continues in an everlasting circle, which is where the word ‘cycle’ comes in. Let’s find out more.

Solid, liquid and gas

You might be used to water being a runny liquid that you use for drinking, washing and playing in but it can also exist as a solid (ice) and a gas (steam or water vapour). The water cycle describes water’s journey from liquid to vapour to liquid again, sometimes becoming a solid in between.

Evaporation

The water cycle is powered by the heat of the sun. It warms up water in places like oceans and lakes which makes it turn from a liquid into a gas and rise up into the sky. This process is called *evaporation*. The water vapour collects in the sky to create clouds.



Condensation

In a process named *condensation*, water vapour in the clouds cools until it becomes water once more.

Precipitation

This liquid water then falls from the sky. It could take the form of rain or snow but also as sleet or hail. Sleet is when liquid water freezes before it hits the ground and hail is small lumps of ice and snow that can drop from the clouds during a thunderstorm. This step of the cycle is *precipitation*.

Collection

The fourth stage of the water cycle is *collection*. During this process, fallen water collects in oceans and lakes before it evaporates into the sky to continue the cycle.

**condensation**

**evaporation**

**precipitation**

**collection**

Wonderful water

Water is essential for all life on earth. Because water is recycled and does not leave the earth, it has been around for millions of years, meaning that you might be drinking water that a dinosaur once drank! You may not know that about three quarters of your body is actually made up of water!

**Questions for *The Water Cycle***

**Set A**

**Vocabulary**

**1.** *This is a process that continues in an everlasting circle.* Which word below means the same as *everlasting*?

***Tick one***

yearly never-ending

temporary sometimes

**2.** Look at the section titled *Evaporation*. **Find** and **copy** a word that means the same as **make**.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3.** Look at the fifth paragraph.

What does the word *precipitation* mean?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Retrieval**

**4.** Look at the second paragraph: *‘Solid, liquid and gas’*

Write **two** things the text says you might use water for.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.** What powers the water cycle?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6.** Which process follows *precipitation* in the water cycle?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Inference**

**7.** In the first paragraph, what tells you that the Earth has underground rivers and lakes?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8.** Look at the statements below. Which is true? **Tick one** then explain your answer underneath.

Only water that has fallen into oceans or lakes as rain evaporates. \_\_\_\_\_

Water that has fallen anywhere as rain but ends up in oceans or lakes evaporates. \_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**9.** Look at the section *Condensation*. Which answer describes how long water remains in clouds before precipitation?

**Tick one**

It falls to earth straight away.

It always stays in clouds for years.

Water rains down when it heats up.

When it has cooled enough, it falls as rain.

**Summarise**

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

|  |  |  |
| --- | --- | --- |
|  | **True** | **False** |
| Water evaporates from clouds to create rain. |  |  |
| Sleet first falls as liquid water then freezes before it hits the ground. |  |  |
| About one quarter of the human body is made of water. |  |  |

**Predict**

**11.** What would happen to life on Earth if there was no water on Earth?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Questions for *The Water Cycle***

**Set B**

**Vocabulary**

**1.** Look at the section *Evaporation*. **Find** and **copy** a word that means *gathers*.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. *…****through the Earth’s surface.* What does the word *surface* mean?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3.**  *Water is essential for all life on earth.* Which word below means the same as *essential*?

***Tick one***

necessary recycled

insignificant collected

**Retrieval**

**4.** Where does water collect in the *collection* stage?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.** Why might you be ‘*drinking water that a dinosaur once drank’?*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6.** Complete the missing sections of this diagram.

**condensation**

**collection**

**Inference**

**7.** ‘*… sometimes becoming a solid in between.’*

Give two examples from the text of when water is a solid.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8.** If we can’t see water evaporating from oceans and lakes, how do we know about it?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**9.** Look at the statements below. Which is true? **Tick one** then explain your answer underneath.

Precipitation means when rain falls from the sky. \_\_\_\_\_

Precipitation means when liquid water falls from the sky. \_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Summarise**

**10.** Here are some summaries of different paragraphs in the text. Number them from **1** to **4** to show the order in which they appear in the text.

Water is very important and very old.

Water can take different forms.

How clouds are formed.

Liquid water falls to earth.

**Authorial intent**

**11.** Read these passages:

*When you hear about the water cycle, do you imagine some kind of bike that travels on water?*

*Let’s find out more.*

*You might be used to water being a runny liquid that you use for drinking, washing and playing in…*

a. Why does the author write parts of the text in this style?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. Find one other example of the author writing in this style and write it below.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Answers for *The Water Cycle***

**Set A:**

**Vocabulary**

**1.** never-ending

**2.** create

**3.** liquid water falling to the ground (rain / sleet / hail / snow)

**Retrieval**

**4.** Any two from: drinking, washing, playing

**5.** the sun

**6.** collection

**Inference**

**7.** The texts says *water moves through the Earth’s surface, atmosphere and below ground.*

**8.** Water that has fallen anywhere as rain but ends up in oceans or lakes evaporates. √

Pupils should explain that water moves through the Earth’s surface, and underground, eventually leading

into the oceans and lakes.

**9.** When it has cooled enough, it falls as rain.

**Summarise**

**10.**

|  |  |  |
| --- | --- | --- |
|  | **True** | **False** |
| Water evaporates from clouds to create rain. |  | X |
| Sleet first falls as liquid water then freezes before it hits the ground. | X |  |
| About one quarter of the human body is made of water. |  | X |

**Predict**

**11.** Pupils should refer to water being necessary for all life, meaning that if there was no water on Earth all living things would die because they need it to stay alive.

**Commissioned by The PiXL Club Ltd.** **October 2019**

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.

PiXL Club Ltd endeavour to trace and contact copyright owners. If there are any inadvertent omissions or errors in the acknowledgements or usage, this is unintended and PiXL will remedy these on written notification.

© Copyright The PiXL Club Limited, 2019

**Answers for *The Water Cycle***

**Set B:**

**Vocabulary**

**1.** collects

**2.** not underneath or above the earth but on it, e.g. the ground or the sea

**3.** necessary

**Retrieval**

**4.** oceans and lakes

**5.** Because water stays on the earth, recycled through the water cycle over and over again, meaning that you are drinking water that has been drank by others before, even dinosaurs millions of years ago.

**6.**

**condensation**

**collection**

**evaporation**

**collection**

**Inference**

**7.** Two from: ice, sleet, hail

**8.** Because clouds are created. (This answer should refer to the text, e.g. not ‘Because puddles dry up in the sun.)

**9.** Precipitation means when liquid water falls from the sky. √

Because it is not just rain that falls from the sky, but also snow, hail and sleet. The water may start out as rain but freeze or cool on its way down to earth.

**Summarise**

**10.**  **4** Water is very important and very old.

**1** Water can take different forms.

**2** How clouds are formed.

**3** Liquid water falls to earth.

**Authorial intent**

**11.** a. The author wrote parts of the text in this style to make it seem like they are talking to the reader / directly to you (to make it more informal).

b. …*you might be drinking water that a dinosaur once drank*!

OR

*You may not know that about three quarters of your body is actually made up of water!*

**Commissioned by The PiXL Club Ltd.** **October 2019**

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.

PiXL Club Ltd endeavour to trace and contact copyright owners. If there are any inadvertent omissions or errors in the acknowledgements or usage, this is unintended and PiXL will remedy these on written notification.

© Copyright The PiXL Club Limited, 2019