

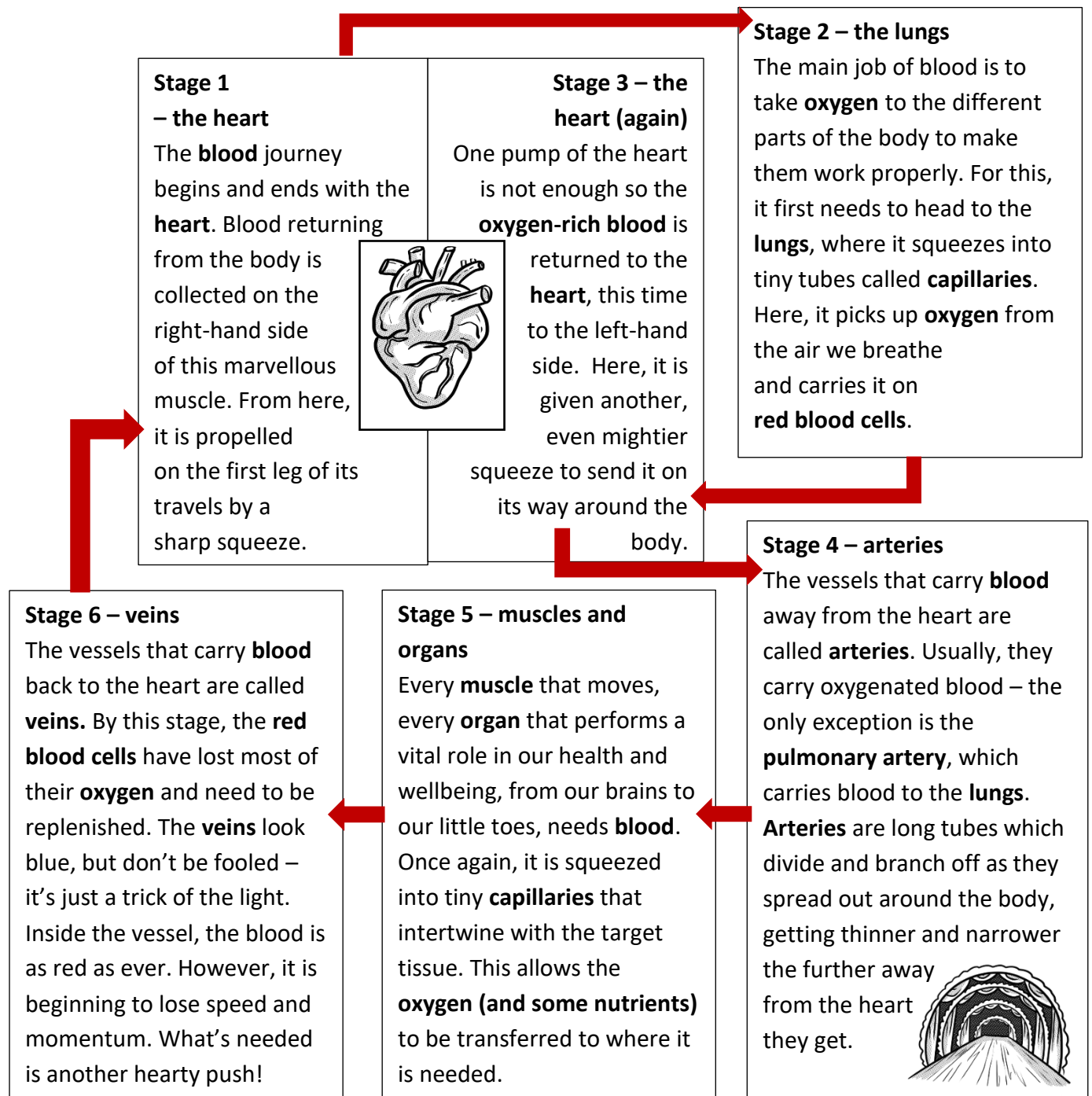
Reading extract and questions:

Year 5 – 6

Circulation

Set A/B

It takes less than a minute for blood to complete a full circuit of an individual's body. It might not be the longest journey in the world but is one of the most important: our very existence depends upon it. So, let's take a closer look at our amazing circulation system.



Did you know?

The main ingredients of blood are **red blood cells**, **white blood cells** (infection fighters) and **plasma**, the straw coloured liquid that keeps the system flowing.

Average-sized adults have about **five litres** of blood in their bodies.



Questions for *Circulation* Set A

Vocabulary:

1. Look at the first paragraph. **Find** and **copy** one word that means *a single person*.

2. Look at **Stage 1**. '*...on the first leg of its travels by a sharp squeeze...*'. In this sentence the word **sharp** is closest in meaning to:

interesting

strong

two-sided

wonderful

3. What does *mightier* mean?

Retrieval

4. Where is the blood that returns from the body collected?

5. According to the text, what is the main job of blood?

6. In which direction do arteries carry the blood?

7. Apart from oxygen, what else does blood transfer to different parts of the body?

Inference

8. Apart from having lost most of its oxygen, how else has the blood changed by the time it reaches the veins?

9. What do the white blood cells do?

Summarise

10. Which of the following would be the most suitable summary of the whole text? **Tick one.**

It describes how the heart works.

It describes the passage of blood around the body.

It explains how to stay healthy.

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It describes what blood is made of.

Authorial intent

11. *What's needed is another hearty push!* Give **two** reasons why the author used the word *hearty*.

a. _____

b. _____

Compare

12. According to the text, give one way that arteries are:

a. similar to veins

b. different from veins.

Questions for *Circulation* Set B

Vocabulary:

1. Look at the introduction. What does *existence* mean? **Tick one.**

travel

way out

survival

circulation

2. Look at Stage 1. **Find** and **copy** one word that means *pushed*.

3. Look at Stage 6. What does *replenished* mean?

Retrieval

4. What are the tiny tubes in the lungs called?

5. What happens to the arteries as they spread out around the body?

6. In which direction do veins carry the blood?

7. Which **two** parts of the body are given as examples of things that need oxygen from the blood.

a. _____ b. _____

Inference

8. How does the author feel about human circulation? Use evidence from the text to support your answer.

9. What is one thing that has **not** changed about the blood when it gets to the veins?

Meaning as a whole

10. Draw lines to match each section to its main content.

Stage 2

The blood picks up oxygen.

Stage 3

The heart pumps oxygen towards the rest of the body.

Stage 4

Oxygen is transferred to different parts of the body.

Stage 5

Oxygen-rich blood is carried around the body.

Predict

11. Based on what you have read, predict what might happen if we did not have white blood cells.

Authorial intent

12. Why have Stage 1 and Stage 3 been placed right next to each other?

Answers for Circulation

Set A:

Vocabulary:

1. individual
2. strong
3. stronger/more powerful/more forceful

Retrieval:

4. the **right-hand** side of the heart
5. to take oxygen to the different parts of the body (to make them work properly)
6. away from the heart
7. nutrients (and some nutrients)

Inference:

8. It has lost speed and momentum (accept either speed or momentum)
9. fight infection

Summarise:

10.

It describes how the heart works.

It describes the passage of blood around the body.

It explains how to stay healthy.

It describes what blood is made of.

✓

Authorial intent:

11.

- a. It refers to the heart. It is a play on words as the text is about the heart.
- b. Hearty also means strong or forceful.

Compare:

12.

a. Accept any of the following:

- They are tubes.
- They carry blood.
- They are connected to the heart.

b. Accept any of the following

- They carry blood away from the heart instead of to it.
- The flow has more speed and momentum.
- They don't look blue from the outside.

(Don't accept 'They carry oxygenated blood' as this is not true of the pulmonary artery.)

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Answers for Circulation

Set B:

Vocabulary:

1. survival
2. propelled
3. filled up again/resupplied/topped up

Retrieval:

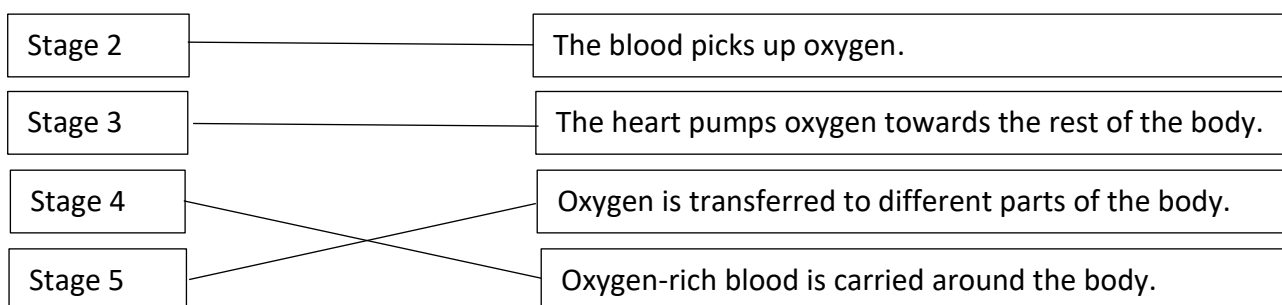
4. capillaries
5. They divide and branch out. They get thinner and narrower.
6. back towards the heart
7. brain/(little)toes

Inference:

8. The author is very impressed and thinks it is special (ensure this is backed up by examples)/Thinks it is amazing/marvellous/ Words like *amazing* and *marvellous* are used to describe it, or parts of it. It is essential and we couldn't live without it.
9. It is still red.

Meaning as a whole:

10.



Predict:

11. We might get ill/infected because we couldn't fight infections.

Compare:

12. to show that they both involve (two sides of) the same part of the body: the heart/because they are both about the heart

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