**Formative Assessment**  Name: **Answer Key**
BIOLOGY: Circulatory System Time: 10 minutes

**Q1.** ***Identify*** one similarity and one difference between mammal (i.e. human) and fish circulatory systems. **(3 marks)**

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| **Similarities – any one of the following options (1 mark):** |
| * Both have a closed circulatory system
 |
| * Both have an atrium and ventricle
 |
| * Both have a heart and blood vessels
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|  |
| **Differences – any one of the following sets (2 marks):**  |
| * Human uses lungs to take in oxygen (1), whereas fish use gills (1)
 |
| * Human RBC do not have a nucleus (1), whereas fish RBC have a compact nucleus (1)
 |
| * Human hearts have four chambers (1), whereas fish hearts have 2 chambers (1)
 |

**Q2.** ***Sequence*** the following into the correct order.  **(3 marks)**

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| Blood then goes into the left ventricle. |
| Blood passes into the right ventricle.  |
| Blood is pumped out of the heart and to body cells via the aorta. |
| Blood enters the right atrium via the vena cava.  |
| Blood is pumped from the heart to the lungs via the pulmonary artery. |
| Blood returns to the left atrium via the pulmonary vein. |

1. Deoxygenated blood moves towards the heart via veins. **Minus ½ per error**
2. Blood enters the right atrium via the vena cava.
3. Blood passes into the right ventricle.
4. Blood is pumped from the heart to the lungs via the pulmonary artery.
5. Blood returns to the left atrium via the pulmonary vein.
6. Blood then goes into the left ventricle.
7. Blood is pumped out of the heart and to body cells via the aorta.

**Q3. *Identify*** the blood vessels in which you will find valves and ***describe*** are their purpose**?**

**(2 marks)**

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| Valves are found in veins **(1).**  |
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| They make sure the blood only flows in one direction / prevent backflow **(1)** |
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**Q4.** Humans have a double circulatory system. ***Explain*** what this means. **(3 marks)**

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| The circulatory system is made up of two loops / circuits joined together **(1).**  |
|  |
| In the first loop the heart pumps blood to the **lungs** to be oxygenated and then it **returns**  |
| **to the heart (1).**  |
|  |
| In the second loop the heart pumps blood all around the body to supply the **cells** so they  |
| are able to**exchange substances** with blood before **returning to the heart (1).**  |
|  |

**PERSONAL LEARNING REFLECTION**

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| One thing I have learnt from doing this activity is… | **SCORE:**\_\_\_\_\_\_ / 11\_\_\_\_\_\_\_ % |