

Circulatory System “Walkthrough” Role Cards

**Life Science (Lower Middle)
Unit 3**

Circulatory System “Walkthrough” Role Cards

Adapted from Blood Circulation Game by the Collaborative Learning Project which is an adaptation of the Blood Circulation Game by June Agar. See activity [here](#).

<p>Brain</p> <p>Function: To control responses to the environment by processing information and sending signals to other parts of the body.</p> <p>Start With: 5 CO₂ cards</p> <p>Location: Head</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect oxygen from passing blood. 2. Give CO₂ to passing blood. 	<p>Brain</p> <p>Function: To control responses to the environment by processing information and sending signals to other parts of the body.</p> <p>Start With: 5 waste cards</p> <p>Location: Head</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect nutrients from passing blood. 2. Give waste to passing blood. 	<p>Lungs</p> <p>Function: To remove carbon dioxide from the blood and release it back into exhaled breaths; to absorb oxygen from the air.</p> <p>Start With: 15 oxygen cards</p> <p>Location: Lungs</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect CO₂ from passing blood. 2. Give oxygen to passing blood.
<p>Stomach & Intestines</p> <p>Function: To break down and absorb nutrients from food.</p> <p>Start With: 5 CO₂ cards</p> <p>Location: Stomach & Intestines</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect oxygen from passing blood. 2. Give CO₂ to passing blood. 	<p>Stomach & Intestines</p> <p>Function: To break down and absorb nutrients from food.</p> <p>Start With: 15 nutrient cards</p> <p>Location: Stomach & Intestines</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Give nutrients to passing blood. 	<p>Liver</p> <p>Function: To remove toxins from the blood and to produce substances used by other parts of the body.</p> <p>Start With: 5 CO₂ cards</p> <p>Location: Liver</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect oxygen from passing blood. 2. Give CO₂ to passing blood.

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<p>Liver</p> <p>Function: To remove toxins from the blood and to produce substances used by other parts of the body.</p> <p>Start With: 5 waste cards</p> <p>Location: Liver</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect non-toxic nutrients from passing blood. 2. Give waste to passing blood. 	<p>Liver</p> <p>Function: To remove toxins from the blood and to produce substances used by other parts of the body.</p> <p>Start With: no cards</p> <p>Location: Liver</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect nutrients marked “toxin.” 	<p>Kidneys</p> <p>Function: To remove waste in the form of urine.</p> <p>Start With: 5 CO₂ cards</p> <p>Location: Kidneys</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect oxygen from passing blood. 2. Give CO₂ to passing blood.
<p>Kidneys</p> <p>Function: To remove waste in the form of urine.</p> <p>Start With: no cards</p> <p>Location: Kidneys</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect nutrients from passing blood. 2. Collect waste from passing blood. 	<p>Leg Muscles</p> <p>Function: To support movement.</p> <p>Start With: 5 CO₂ cards</p> <p>Location: Legs</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect oxygen from passing blood. 2. Give CO₂ to passing blood. 	<p>Leg Muscles</p> <p>Function: To support movement.</p> <p>Start With: 5 waste cards</p> <p>Location: Legs</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Collect nutrients from passing blood. 2. Give waste to passing blood.

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<p>Heart</p> <p>Function: To pump blood around the body.</p> <p>Start With: no cards</p> <p>Location: Right side of heart (where blood enters from the body)</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Gently push blood to lungs. 	<p>Heart</p> <p>Function: To pump blood around the body.</p> <p>Start With: no cards</p> <p>Location: Left side of heart (where blood enters from the lungs)</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Gently push blood to the body. 	<p>Blood</p> <p>Function: To carry gases, nutrients, and wastes around the body.</p> <p>Start With: 1 nutrient and 1 oxygen card</p> <p>Location: Anywhere on right side of body</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Follow the path of blood circulation. 2. Give oxygen and nutrients to different parts of the body. 3. Collect waste from different parts of the body.
<p>Eating</p> <p>Function: To provide a supply of nutrients to the body.</p> <p>Start With: n/a</p> <p>Location: n/a</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Give nutrients to the stomach and intestines by collecting Nutrient cards from the Brain, Liver, Kidneys, and Leg Muscles and giving them to the nutrient provider in the Stomach. 	<p>Breathing In</p> <p>Function: To absorb oxygen from the air.</p> <p>Start With: n/a</p> <p>Location: n/a</p> <p>Job:</p> <ol style="list-style-type: none"> 1. Provide energy to the lungs by collecting Oxygen cards from the Brain, Stomach, Intestines, Liver, Kidneys, and Leg Muscles and giving them to the Lungs. 	<p>Breathing Out</p> <p>Function: To release carbon dioxide into the air.</p> <p>Start With: n/a</p> <p>Location: n/a</p> <p>Job:</p> <p>Remove CO₂ from the lungs by collecting CO₂ from the Lungs and giving them to oxygen users in the Brain, Stomach, Intestines, Liver, Kidneys, and Leg Muscles.</p>

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Urination

Function: To release liquid waste from the body in the form of urine.

Start With: n/a

Location: n/a

Job:

1. Remove waste from the blood by collecting waste cards from the Kidneys and giving them to nutrient users located in the Brain, Liver, and Leg Muscles.