ID Number: _____

Causal Loop Diagrams

Below are examples of narratives diagrammed in causal loop diagrams. On the left is the narrative, and on the right is the causal loop diagram.

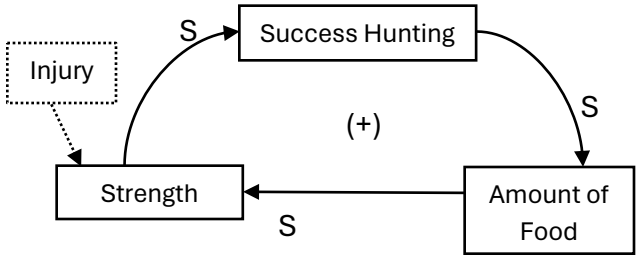
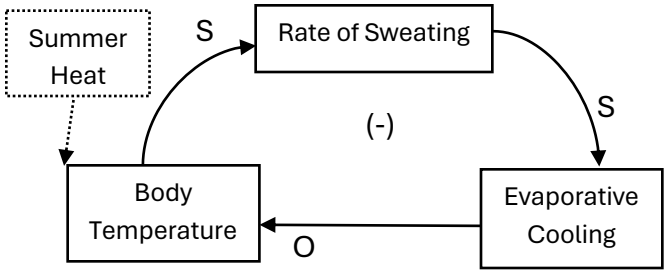
Narrative	Causal Loop Diagram
When an injury reduces an animal's strength, it may reduce a carnivore's chance of successfully catching prey. Lack of food will further reduce the animal's strength. This is a positive feedback loop because the initial nudge (injury) pushes strength down, and the feedback loop pushes strength in the same direction, down.	
When summer heat makes the human body too hot, it may respond by sweating. Evaporation of sweat from the skin causes the body temperature to go back down. This is a negative feedback loop because the initial nudge (summer heat) pushes body temperature up, and the feedback loop pushes body temperature in the opposite direction, back down.	

Diagram 1: Below is the start of another narrative, and a partially filled out causal loop diagram. Fill out the blank spaces in the diagram. There are 5 places for you to fill out in the diagram: 1 blank node, the labels of the 3 arrows ("S" for "same" or "O" for opposite), and the sign for the type of loop in the middle (+ for positive feedback or – for negative feedback).

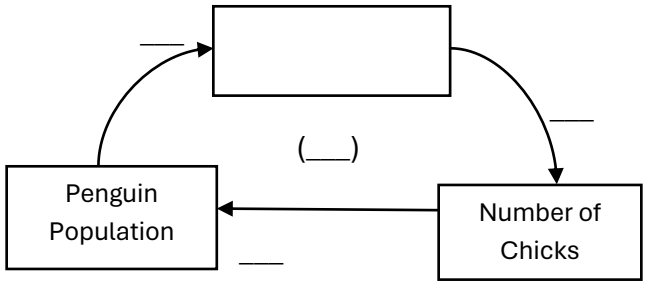
Narrative	Causal Loop Diagram
When penguins have a new generation of chicks, that generation of chicks will grow up to have even more chicks in the next generation. Each subsequent generation has more and more chicks. Over time, penguins can overpopulate an area which will decrease the amount of available food. The lack of food will in turn lower the number of chicks born each year.	

Diagram 2: Below is the start of another narrative, and a partially filled out causal loop diagram. Fill out the blank spaces in the diagram. There are 6 places for you to fill out in the diagram: 2 blank nodes, the labels of the 3 arrows ("S" for "same" or "O" for opposite), and the sign for the middle of the loop (+ for positive or – for negative).

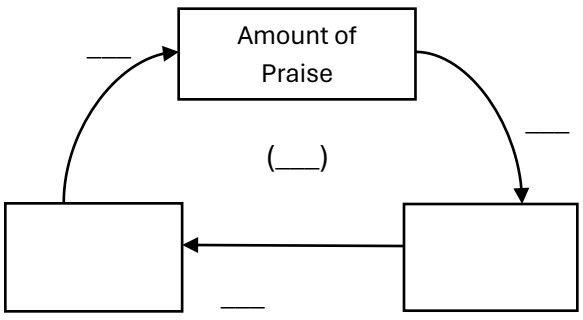
Narrative	Causal Loop Diagram
When Francesca is less efficient at completing a project at work, she receives less than usual praise from her boss and coworkers. She is less happy at work and less efficient at completing the next project. This is how employees function in many offices.	

Diagram 3: Below is the start of another narrative, and a partially filled out causal loop diagram. Fill out the blank spaces in the diagram. There are 7 places for you to fill out in the diagram: 3 blank nodes, the labels of the 3 arrows ("S" for "same" or "O" for opposite), and the sign for the middle of the loop (+ for positive or – for negative).

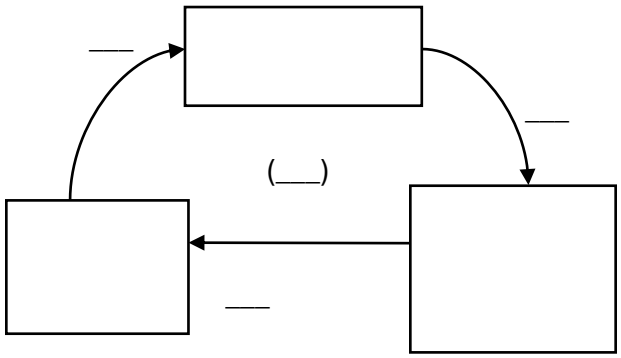
Narrative	Causal Loop Diagram
Early in the COVID-19 pandemic, as the number of cases rose, local governments passed more stringent regulations against social gatherings. As a result of these strict restrictions, fewer places were open for gathering, which created fewer opportunities for transmission, and consequently, the number of cases fell. This is how restrictions on social gatherings operate during a pandemic.	

Diagram 4: Below is the start of another narrative, and a blank area to draw a causal loop diagram. Remember to include all nodes, the labels of the arrows ("S" for "same" or "O" for opposite), and the sign for the middle of the loop (+ for positive or – for negative).

Narrative	Causal Loop Diagram
Growth in a country's economy leads to increased wages. Increased wages lead to increased spending by consumers. This causes more growth in the economy and further increases in wages. This is how an economy increases the number of well-paying jobs.	