

**Penguin Foraging: Where & Why? - Worksheet**  
**TEACHER ANSWER KEY**

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Penguin Foraging Simulation**

<b>Your Data</b>	<b>Pink Beads</b>	<b>White Beads</b>
<b>Round 1 (Raw Data)</b>		
<b>Round 2 (Raw Data)</b>		

How much krill were you all able to gather for your penguin chick?

<b>Class Data</b>	<b>Pink Beads</b>	<b>White Beads</b>
<b>Round 1 (Raw Data)</b>		
<b>Round 1 (Average Data)</b>		
<b>Round 2 (Raw Data)</b>		
<b>Round 2 (Average Data)</b>		

What new questions do you have?

**Scientific Explanation:** What patterns do you observe in the location or amount of Habitat Use by the penguins over time near Palmer Station?

**Evidence:** Provide scientific data from the Penguin Habitat Use maps to support what patterns you observe in the location or amount of Habitat Use by the penguins over time near Palmer Station. Use appropriate and sufficient data.

*In the beginning of the dataset, earlier in the month, the red patches (higher percentage of Habitat Use) of Habitat Use are predominately close to Palmer Station. The yellow areas, lower percentages of Habitat Use, always surround the red areas but can also occur without any red areas inside.*

*Towards the middle to end of the dataset, later in the month, the red patches (higher percentage of Habitat Use) of Habitat Use extend farther south and east/west from the Palmer Station area. Again, the yellow areas, lower percentages of Habitat Use, always surround the red areas but can also occur without any red areas inside.*

**Reasoning:** Use your evidence to show how your data result in your claim. Also, tell why your data count as evidence to support your claim by using scientific principles. Remember, reasoning is the process where you apply your science knowledge to answer the question.

*Earlier in the month the penguins often can be found with the highest Habitat Use close to Palmer Station (their colony). The exact location varies by hour and day slightly, but in general they are close into the station.*

*Later in the month the penguins are more spread out north/south and east/west away from the Palmer Station area. Again, the exact location varies by hour and day, but in general they are using a larger area of the water around Palmer Station.*

*Additionally, the amount of Habitat Use from yellow (0-20%) to red (80-100%) also varies by hour and day.*

**Claim:** Write a statement that responds to the above driving question.

*The location and amount of penguins' Habitat Use varies over time near Palmer Station.*