

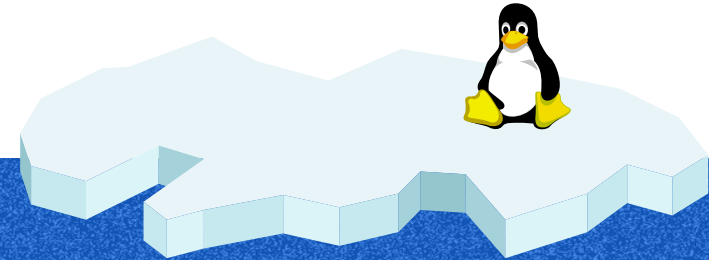
Name \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_



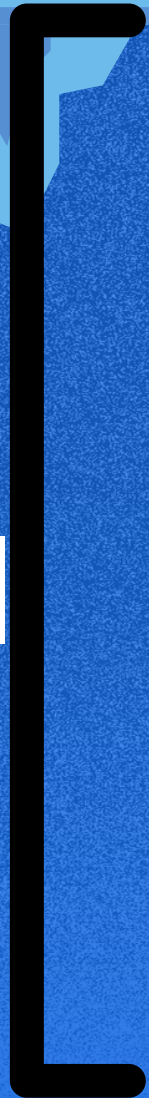
S.A. Agulhas II



Endurance



~10,000 feet



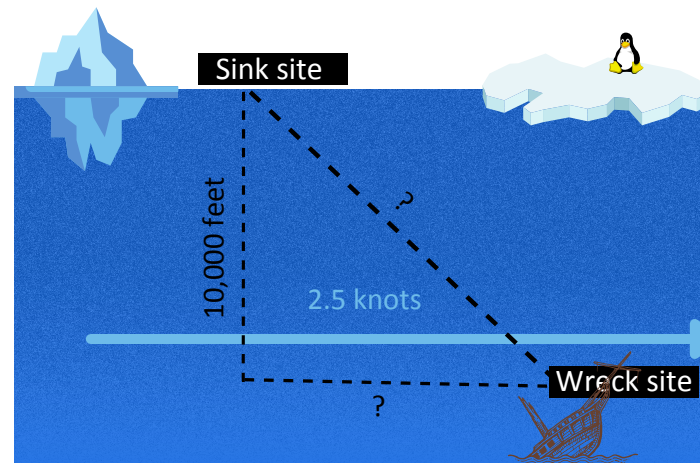
Name \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_

1. The Endurance lies on the ocean floor, about 10,000 feet below the surface, where the S.A. Agulhas II is stationed. An average school bus is 35 feet long. How many whole school buses could fit between the S. A. Agulhas II and the Endurance?

2. Let's assume that the ocean current at the sink site moved at 2.5 knots (1 knot = 1 nautical mile per hour) while the endurance sank.



a) If the ship took 8 hours to sink, how far is the final Endurance wreck site from its sinking site now?

b) How far did Endurance move while sinking? Use the Pythagorean Theorem to find your answer. (1 nm = 6,076 feet)



# ANSWER KEY

Name \_\_\_\_\_

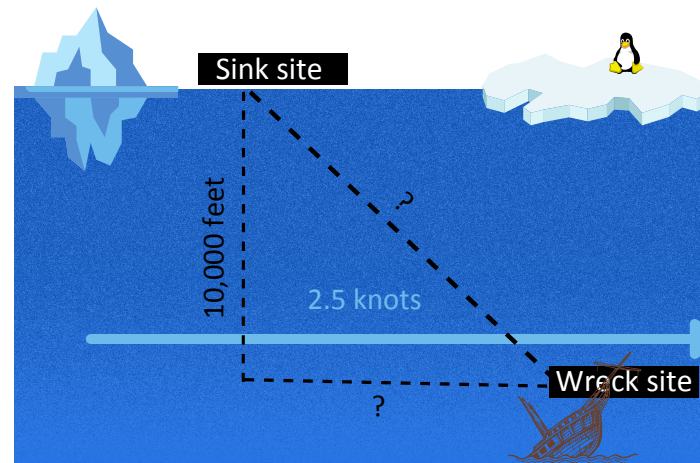
Date \_\_\_\_\_

Class \_\_\_\_\_

1. The Endurance lies on the ocean floor, about 10,000 feet below the surface, where the S.A. Agulhas II is stationed. An average school bus is 35 feet long. How many whole school buses could fit between the S. A. Agulhas II and the Endurance?

285 school buses

2. Let's assume that the ocean current at the sink site moved at 2.5 knots (1 knot = 1 nautical mile per hour) while the endurance sank.



- a) If the ship took 8 hours to sink, how far is the final Endurance wreck site from its sinking site now?

20 nautical miles

- b) How far did Endurance move while sinking? Use the Pythagorean Theorem to find your answer. (1 nm = 6,076 feet)

$$\begin{aligned} 10,000 \text{ feet} &= 1.65 \text{ nautical miles} \\ 1.65^2 + 20^2 &= 402.72 \text{ nautical miles} \\ \text{sq root of } 402.72 &= 20.06 \text{ nautical miles} \end{aligned}$$