Understanding Rates of Changes and the OCEARCH Shark Tracker

OCEARCH Shark Tracker tracks several classes of animals including sharks, turtles, and seals. You will be tracking several animals and computing their average speeds over different time intervals to determine how accurate the data appears across extended periods of time.

Directions

Go to the OCEARCH Shark Tracker: https://www.ocearch.org/tracker/

Using the given distance tracked and time interval, calculate the average speed in mi/day for two specific animals in three different classes.

Activity

Animal Class and Name	Total Distance (mi)	Total Time (days)	Average (mi/day)	Average (mi/h)
Shark 1:				
Shark 2:				
_____ 1:				
_____ 2:				
_____ 1:				
_____ 2:				

1. Do you think your calculations for the animals' daily speeds are accurate enough to be used to determine the speed of an animal?

2. Do you think your calculations for the animals' hourly speeds are accurate? What assumptions had to be made when calculating hourly speed from the data you were provided?

3. What additional data could help you know with greater accuracy how far an animal travels in one hour?