



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

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

## Worksheet: Megalodon - Biggest Shark that Ever Roamed the Seas



Megalodon is the largest shark to have ever lived!  
But just how big was Megalodon?

Today, you will determine its size using the exact methods of professional scientists.

### Background

Complete shark skeletons are not found in the fossil record. Do you know why that is? (Hint: wiggle your nose and ears for the answer.) Because we don't have complete fossilized skeletons of Megalodon, we must instead look at living sharks as a model.

### Key Question

Is there a predictable relationship between tooth width and body length in modern-day sharks?

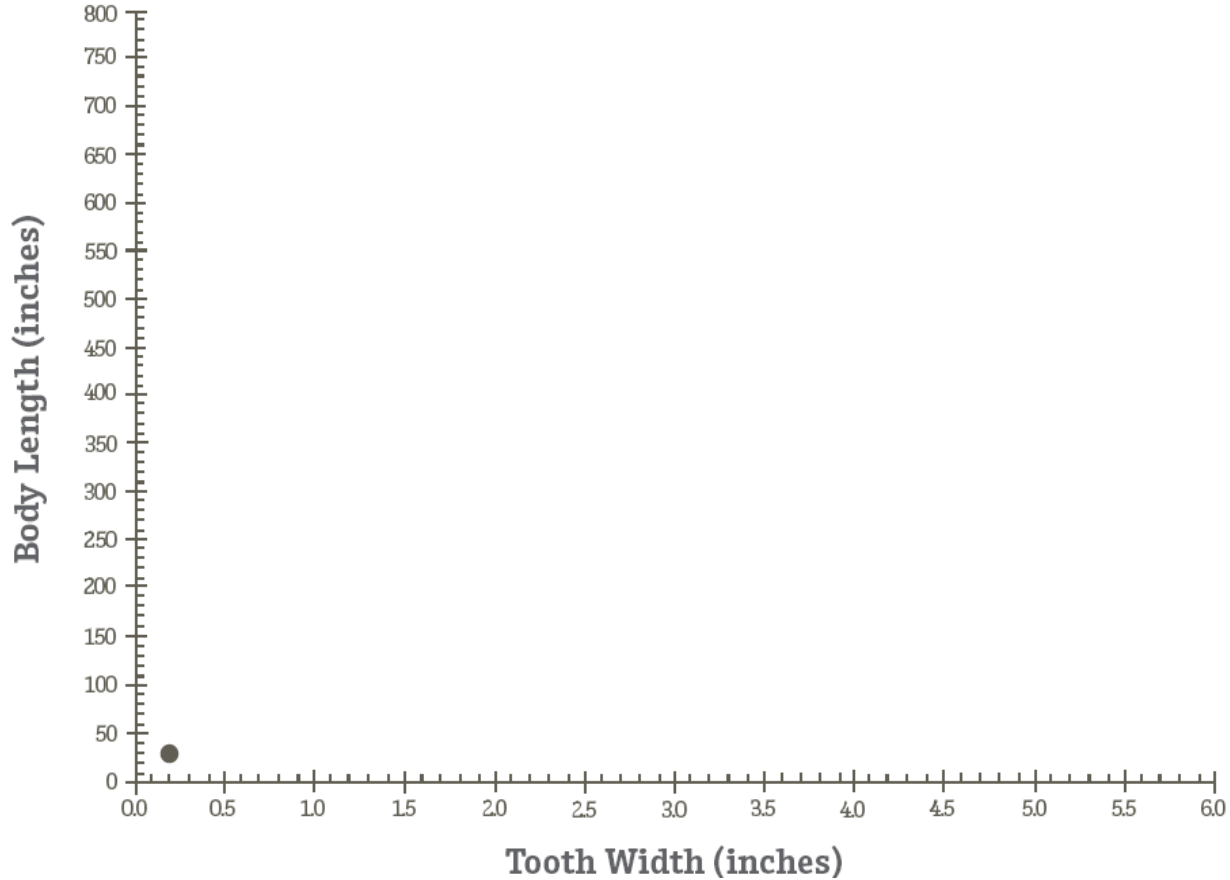
### Directions

- Develop a hypothesis to help answer the key question.
- Use the data in the Data Table to test your hypothesis.
- Plot tooth width (your independent variable) on the x-axis and body length (your dependant variable) on the y-axis. The first data point has already been plotted on the graph.
- After you have plotted all of the data, answer questions 1 and 2.
- Extend your graph to intersect with the Megalodon tooth width of 5.5 inches and determine Megalodon's body length, answer question 3.

DATA TABLE	
Tooth Width (inches)	Body Length (inches)
0.2	26
0.5	64
0.8	100
1.0	127
1.2	150
1.4	180
1.5	190
2.0	250

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

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



### Questions

1. What is your null hypothesis? Is it testable and falsifiable? Why or why not?
2. After graphing your data, is your null hypothesis supported or falsified? Explain.
3. After extending the graph to meet the tooth width of Megalodon, what is your estimate for Megalodon's body length?

### Extra Credit:

Do you have any concerns about this estimate? Why or why not?