



*Fins and Flippers - Whale to Scale!*

*#Head, #Hands, #Heart, #Natural History*

Activity Snapshot:

- The whales that move through our ocean are magnificent, enormous creatures - and sometimes it can be difficult to understand how big they really are.
- This activity will help us compare the whale to ourselves and several other creatures to appreciate just how large they are :)

Goal:

To use some graph paper and simple maths to draw a whale to scale!

Time Recommended:

20-30 minutes

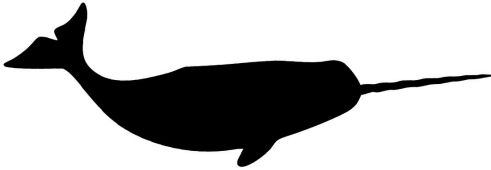


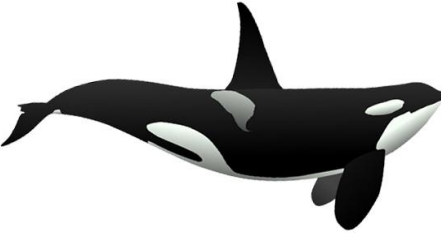

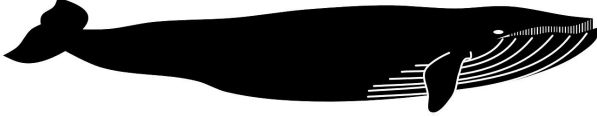
Materials:

Graph paper (some simple graph lines will be provided below if you'd like to print this out)

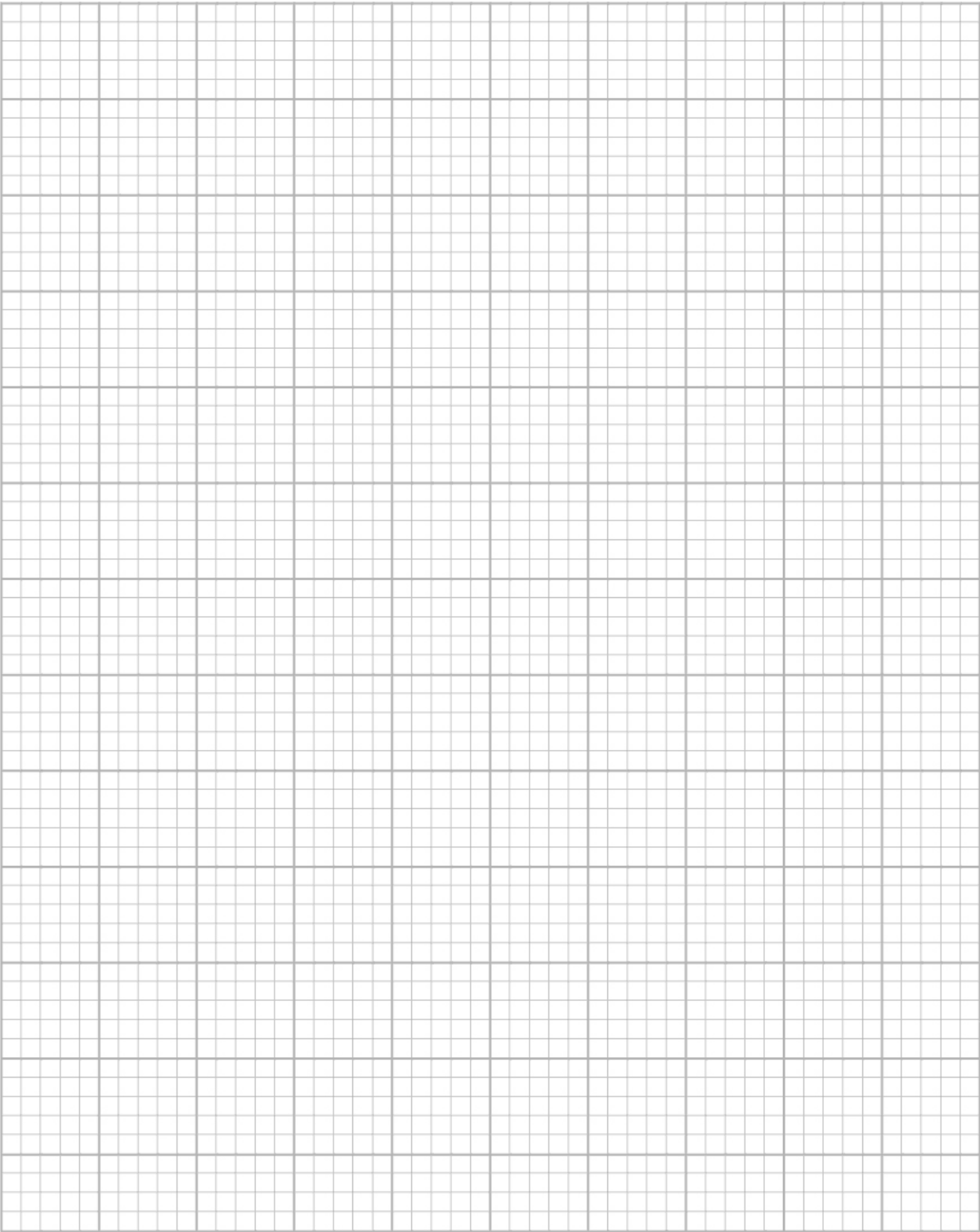
Writing utensils (pen, pencil, crayon, etc.)

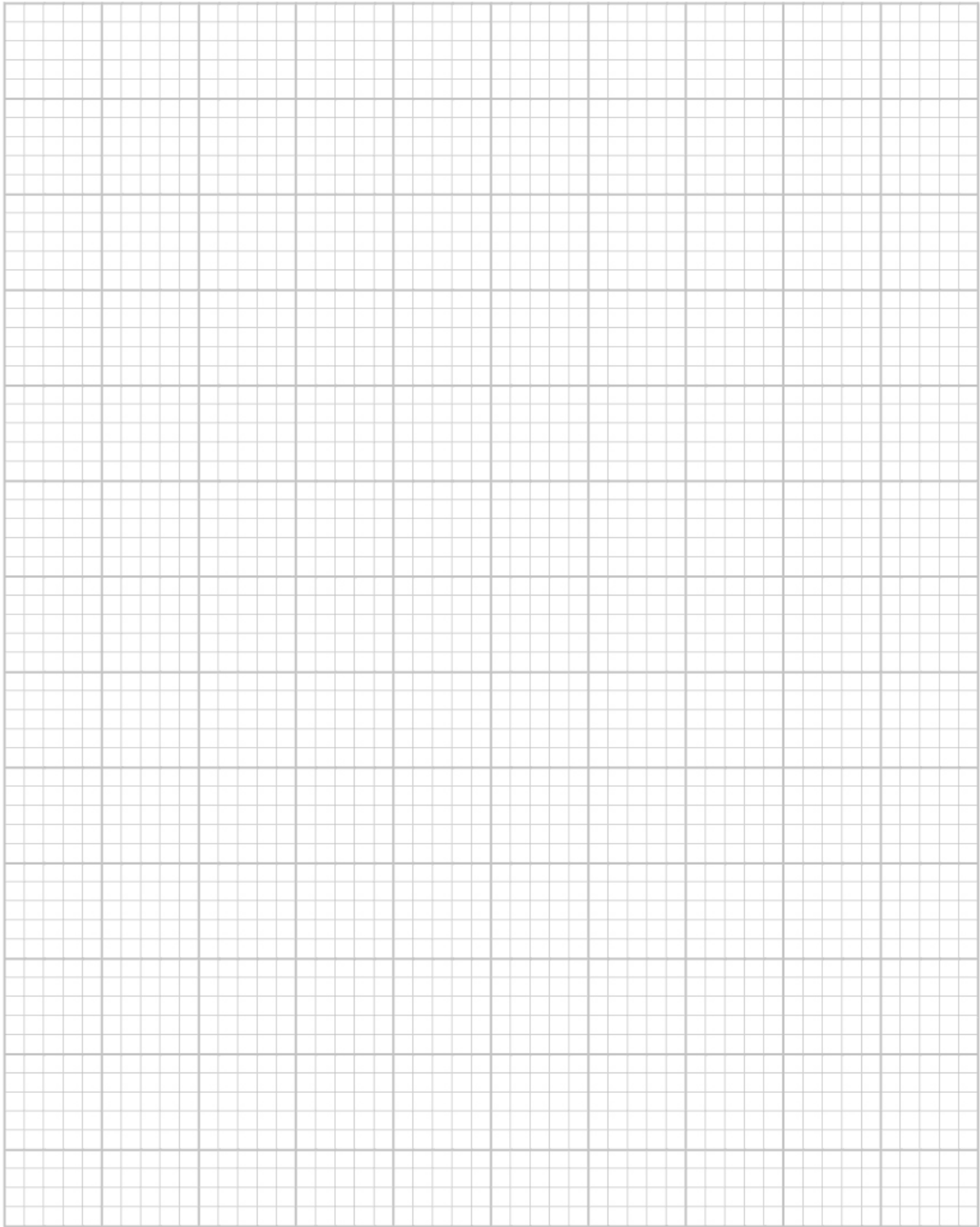
### Instructions:

1. First of all, we should measure ourselves! How tall are you? It's okay if it is not exactly accurate - we just want to know about how many feet tall. If you do not have a ruler or measuring tape, you could use a simple piece of paper! A piece of paper is 11 inches long, close enough to one foot - how many pieces of paper tall are you?
2. Choose a scale. Before you draw on the paper, you need to set the scale: How many feet will one square represent? 1 ft? 5 ft? It is up to you!
3. Draw yourself on the graph!
  - a. This can be as accurate or simple as you like - even a simple stick figure!
  - b. Make sure to draw yourself to scale! For example, if your scale is 1 square = 5 feet, and you are 5 feet tall, you are only the size of one square!! But, if your scale is 1 square = 1 foot, then you are 5 squares tall. See?
4. Now that we are represented in our picture, we can think about some other familiar objects to compare.
  - a. I am going to include a few objects in this worksheet that you could cut out and place on your graph paper to show the scale :)
    - i. One of these is set to 1 square = 1 foot, one is set to 1 square = 2 feet, and one is set to 1 square = 5 feet.
5. Now let's think about some creatures we learned about in Fins and Flippers - just how big are they compared to you?
  - a. Below is a chart with the animals' names, and their length/height. Choose at least two and try to represent these in drawings on your graph!

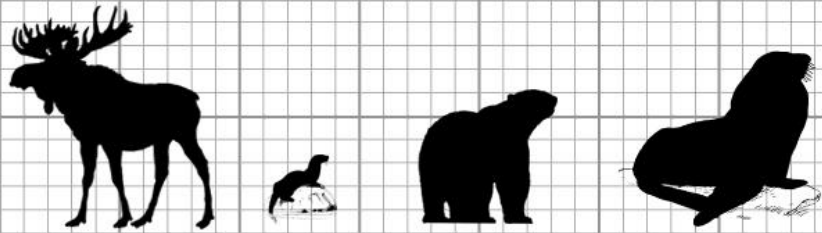
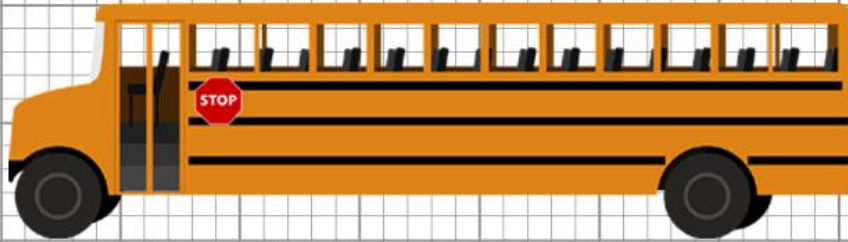
<p>Narwhal</p> 	<p>13-18 feet! (13-18 squares, or ~3 squares)</p>
<p>Beluga Whale</p> 	<p>15-18 feet! (15-18 squares, or 3-4 squares)</p>
<p>Pilot Whale</p> 	<p>15-20 feet! (15-20 squares, or 3-4 squares)</p>
<p>Orca Whale</p> 	<p>32 feet! (32 squares, or 6 squares)</p>
<p>Right Whale</p> 	<p>42-50 feet! (42-50 squares, or 8-10 squares)</p>
<p>Blue Whale</p> 	<p>105 feet! (105 squares, or 21 squares)</p>

GRAPH PAPER:

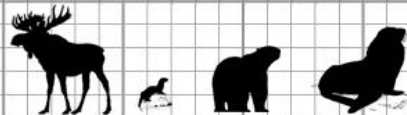
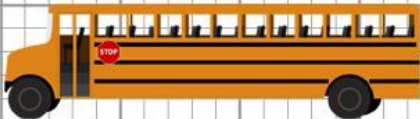




**SCALE: 1sq=1ft**



**SCALE: 1sq=2ft**



**SCALE: 1sq=5ft**

