

Instructions Handout

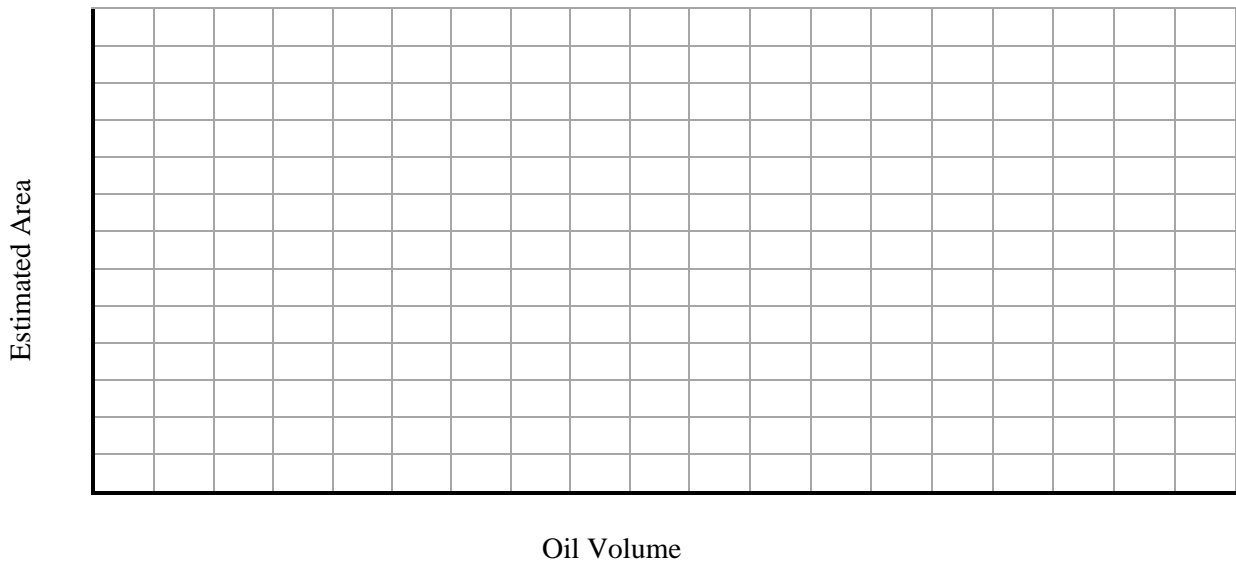
Like the challenge the environmental engineers faced, you are asked to estimate the amount of oil that was spilled in a given image.

To mimic the spill, work in pairs to create oil spills of different sizes.

Take turns *spilling a known amount of oil* and *estimating the area the spill covers*.

Record at least 5 different data points in the table (the more the merrier).

Oil Volume	Estimated Area



Let's try plotting the data points you have collected and make some predictions:

- 1- As the amount of spilled oil increases, what would be the area that is covered by the oil?

- 2- If you were to plot the data points you have collected, what would the graph look like?

- 3- What would be the area that is covered by oil when the amount of spilled oil is zero?

After creating the model:

- If there is 5000 mL of oil spilled on the water, **how** would you use the model to determine the area it covers?

- If an amount of oil has already been spilled, but you don't know how many mL were spilled, **how** would you determine that amount?

- If the spill covers an area of 144 square centimeters, what was the spilled amount?

- What is the amount of oil that is spilled in the image I provided you earlier?

Exit Ticket:

1. List one thing you found most interesting about this activity.

2. List two questions you still have about this activity or anything related to oil spill estimations.

3. List three possible impacts that oil-spills can have on humans' resources.