

- 1) Open StatCrunch the StatCrunch Website. Scroll down to find [Car details 2019 models](#)
- 2) Navigate to [Applets-> Confidence Intervals-> for a Proportions](#)
- 3) Select From Data Table, Values in: Engine(liter), Success: Electric

Confidence intervals for a proportion

Population:

Proportion with characteristic

p:

From data table

Values in:

Where:

--optional--

Success:

- 4) Adjust the samples size n= Until the Confidence level .95 is close to the Proportion of intervals that contain p.
- 5) Pick one of the 1000 intervals generated.
- 6) For this one interval report back to the class x, n,  $\hat{p}$  and the 95% confidence interval. Write a sentence explaining its meaning.

7) Use the formula  $E = Z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{p}\hat{q}}{n}}$  to derive the confidence interval you picked.

