Airplane Efficiency Assignment

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

You work for an airline company, and are asked to help choose a new model of commercial aircraft. Your board of directors has narrowed it down to two choices: The BraunPlane and the SmithJet. The determining factor will be the fuel efficiency of the plane. Both models are found to be identical in all of the other important categories, but the fuel efficiency is yet to be analyzed.

You are given some experimental test results regarding the fuel efficiency of each plane. Your job is to analyze it and make a recommendation to your company. The data is below:

**BraunPlane Fuel Efficiencies** (Litres/100 passenger kms)

3.45, 3.65, 3.6, 3.35, 3.4, 3.45, 3.5, 3.55, 3.45, 3.6, 3.35, 3.5 3.3, 3.45, 3.5, 3.6

**SmithJet Fuel Efficiencies** (Litres/100 passenger kms)

3.55, 3.4, 3.6, 3.45, 3.35, 3.3, 3.6, 3.55, 3.4, 3.35, 3.6, 3.25, 3.7,3.45, 3.5, 3.4

Your recommendation should be in the form of a 1 to 2 page report following. Recommendations should be based on and include:

* Introduction paragraph
* Proper formatting: headers, titles, sections, lead in sentences, full sentences, etc.
* Histogram, box-whisker plots, etc.
* Mathematical analysis (mean, median, IQR, standard deviations, %spread, etc.)
* Your conclusion should reference your mathematical analysis.