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| **Key Topics and Learning Sequence**  |
| **= First Steps** |  **= Moving On** |  **= Stretch** |  **= Challenge** |
| **1. What is an average?**1. What is the **middle of a data set**?
2. Types of data **Qualitative, Quantitative, Discreet** and **Continuous**
3. What is the **mode?**
4. What is the **median?**
5. What is the **mean**?
 | **2. Focus on the Mean**1. How to calculate the **mean**
2. **Outliers:** What are they and how to treat them
3. Changing and **Combining data sets** and the mean
4. Similarities and Differences between averages
 | **3. Spread and variation**1. What do we mean by **spread** and **variation**
2. Calculating the **range**
3. Calculating **quartiles** (extension)

d. Calculating the **Inter-Quartile Range** (extension)  | **4. Averages and racism**a) Exploring data and charts on racial inequality b) Averages and racial inequality  | **5. Comparing Data Sets and Box Plots (extension)**1. Using Averages and measures of Spread to **compare data sets**
2. Drawing a **Box Plot**
3. Drawing **parallel box plots** to compare data sets
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| **How does this unit fit into your mathematical learning journey?** | **Further Exploration, Enrichment and Cultural Capital** |
| This unit builds on work from **year 7** on **collecting data..** Here you learn about measures that represent **data sets**. In **year 10** you will do a unit on **Frequency** which uses these ideas with larger data sets, in the context of **Racial Inequality.** | **Reading:** **Enrichment:** Watch this video about how data shows the world changing. Where do you see averages in it? https://youtu.be/jbkSRLYSojo**Cultural Capital:** Go to the Florence Nightingale Museum in London. Famous as a nurse, but she was so much more! In fact, she used data to revolutionise medicine! |

**LPS Mathematics: Year 9 Unit 2 – Averages and Spread Enquiry Question:** “**Does your postcode affect your average wage?”**

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**Date: Initial Thoughts:**

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**Date: New Thoughts:**

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**Date: Final Thoughts:**

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