LUCKY THE LEPRECHAUN'S
STATISTICS ADVENTURE

Lucky the Leprechaun is thinking about becoming a gold collector!

To help him better understand his decision he has asked 20 beginner leprechaun gold collectors how many pounds of gold they found in their first year.

Here are their answers:
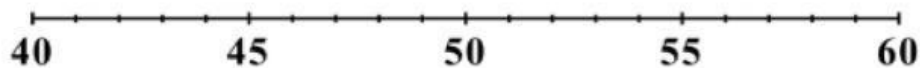57, 44, 52, 49, 53, 50, 54, 55, 58, 47, 53, 46, 52, 46, 42, 53, 50, 53, 50, 52

Can you help Lucky answer this question: **How much gold should I expect to collect in my first year as a gold collector?**
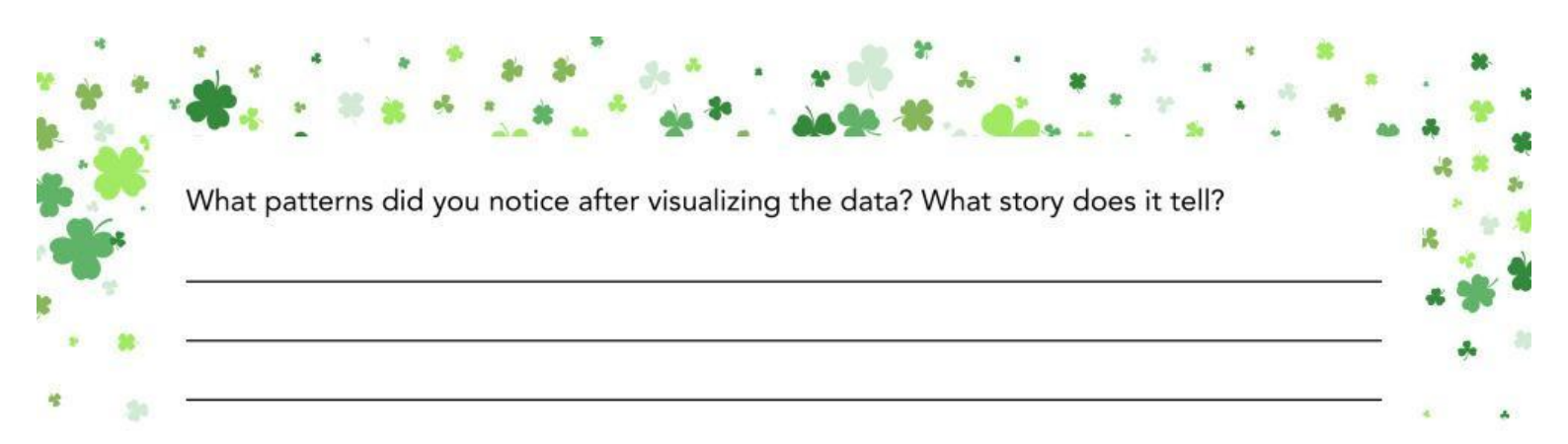
First Impressions

Just by looking at the numbers, what do you notice about how much gold leprechaun's collect during their first year as gold collectors?

_____

_____

_____

Data Visualization

Create a visual representation of the data using a dot plot.

```
  |--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--|
 40         45         50         55         60
```

What patterns did you notice after visualizing the data? What story does it tell?

_____

_____

_____

_____

Analyzing the Data

Measures of Center:

Mean: _____

Median: _____

Mode: _____

Which measure of center do you think is most useful for Lucky? Why?

_____

_____

_____

Measures of Spread:

Minimum Value: _____

Maximum Value: _____

Range: _____

What does the spread of the data tell Lucky about gold collecting?

_____

_____

_____

Making Predictions

Based on the data, what amount of gold should Lucky expect to collect in his first year?

_____

What range of values might Lucky reasonably expect?

_____

How confident are you in your prediction? Explain

_____

_____

_____

Your Letter to Lucky

Dear Lucky,

After analyzing your data on beginner gold collectors, here's what I discovered:

Typically, beginner gold collectors find _____

The variation in gold collection is _____

Based on this analysis, I would recommend _____

_____

_____

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_____

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_____