You are going to carry out an investigation which will require you to gather data using your family.

1. Get a timer (anything with the ability to time).
2. Get a $2 p$ or a 50 p piece.
3. Ask a member of your family to put their left hand behind their back.
4. They then need to turn over the coin as many times as they can in $\mathbf{6 0}$ secs.
5. Write down the number in a table.
6. Repeat the activity 3 times.
7. Then repeat the activity 3 times, this time with their right hand behind their backs and using their left hand to turn the coin.
8. Do this for each family member-don't forget to do it yourself!

With your results complete the following table:

| Name | Coin Turns With Right Hand |  |  | Coin Turns With Left Hand |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $1^{\text {st }}$ Attempt | $2^{\text {nd }}$ Attempt | $3^{\text {rd }}$ Attempt | $1^{\text {st }}$ Attempt | $2^{\text {nd }}$ Attempt | $3^{\text {rd }}$ Attempt |
|  |  |  |  |  |  |  |
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## Questions:

1. What is the mean for each of your family members with their right hand?
2. What is the mean for each of your family members with their left hand?
3. What is the median with the right hand for all family members?
4. Which family member has the most average turns with either hand?
5. What is the range of turns for the right hand for all members in the family?
6. What is the range of turns for the left hand for all members in the family?
7. What is the mode for either hand and all family members?
8. What is the overall average for your family with their left hand?
9. What is the overall average for your family with their right hand?
10. Which family members average shows they turned the coin over more times than the family average for each hand?
11. Is anyone better with their left hand than their right? Why might that be?
