Toys vs. Us Comparison

Our toy: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| What are we measuring? | Toy Measurement (cm) | Group Member 1 Measurement (cm) | Group Member 2 Measurement (cm) | Group Member 3 Measurement (cm) | Average of Group Members’ Measurements (cm) |
| Height |  |  |  |  |  |
| Wingspan |  |  |  |  |  |
| Forearm |  |  |  |  |  |
| Foot |  |  |  |  |  |

How will your group determine if the toy has the same proportions as the people in your group? Write your plan here:

|  |
| --- |
|  |

In the space below, show the math used to compare the toy with your group member.

|  |
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|  |

Is your toy proportional to your group members? Provide evidence to support your claim.

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|  |

Your Model Doll:

|  |  |  |  |
| --- | --- | --- | --- |
| Body Part Measured | Original Measurement of the Doll | My Original Measurement | New Measurement of the Doll Based on My Measurement |
| **Height** |  |  |  |
| **Wingspan** |  |  |  |
| **Forearm** |  |  |  |
| **Foot** |  |  |  |

Draw a model of what the doll will look like. Your model should:

* Reflect your calculations in the last column
* Be labeled with your calculated measurements
* Be drawn accurately to the best of your abilities

Write a paragraph in the space below in which you:

* Explain what it means for two things to be proportional.
* Explain how you determine or prove that two things are proportional.
* Give at least three reasons why a toy maker or animator must understand the mathematics behind proportions and how they may, or may not, use them to create their work.

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