Toys vs. Us

Your group’s toy: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- | --- | --- | --- |
| **Part Measured** | **Toy Measurement (cm)** | **Group Member 1 Measurement (cm)** | **Group Member 2 Measurement (cm)** | **Group Member 3 Measurement (cm)** | **Average of Member****Measurements (cm)** |
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How can you figure out if the toy has the same proportions as the people in your group?
Write your plan here:

Compare the toy with one of your group members. Use this space to show your math:

Is your toy proportional to the members of your group? Support your claim with data:

Your Toy Self—How Big Should I Be?

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| --- | --- | --- | --- |
| **Body Part Measured** | **Toy’s Original Measurement** | **My Original Measurement** | **My Toy’s Measurement Based on My Proportions** |
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Now, create a model of what your toy should look like. Your model should:

* be based on your calculations (the last column in the above table).
* show your calculated measurements labeled on the model.
* include a model that isn’t perfect, but reflects effort.

Below, write a paragraph explaining what it means for two things to be proportional. Explain how you determine whether two things are proportional. Give at least three reasons why a toy maker or an animator would need to understand the mathematics behind proportions, or how they would use them (or skew them) in their work.

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