## TOYS VS. US

Your group's toy: $\qquad$

| Part |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measured | Toy <br> Measurement <br> $(\mathrm{cm})$ | Group <br> Member 1 <br> Measurement <br> $(\mathrm{cm})$ | Group <br> Member 2 <br> Measurement <br> $(\mathrm{cm})$ | Group <br> Member 3 <br> Measurement <br> $(\mathrm{cm})$ | Average of <br> Member |
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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?

| Body Part Measured | Toy's Original <br> Measurement | My Original <br> Measurement | My Toy's <br> Measurement Based <br> 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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