**Participant Names:**

**Barbie and Ken Go Bungee Jumping**

MP.1: Makes sense of problems and persevere in solving them

MP.4: Model with mathematics

MP.5: Use appropriate tools strategically

**Directions:**

Divide into groups of 4

Design an experiment where you figure out how many rubber bands are needed to get “Barbie” as close to the ground as possible without touching. (Traumatic head/foot injuries – even in dolls – can be life-changing).

Get tools and materials

Decide on how many different heights you will test and how many trials you will run at each height.

Record your data in a lab sheet of your own creation.

Graph your data and build a function to describe your data.

Predict how many rubber bands your “Barbie” will need to safely jump off of one of the 4 jump sites (get “Barbie” as close to the ground as possible without touching). Your team gets one shot at this jump.

Fill in reflection sheet below (Please use mathematical language):

|  |  |
| --- | --- |
| Reflection Sheet: (turned in at the end of Lab) | |
| Prediction: |  |
| Function: |  |
| Result: |  |
| How could your team have made your final jump more successful? |  |
| How would you extend this lab? |  |
| Comments/Additional notes: |  |