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## Recycled Towers Worksheet

## Recyclable materials available:

1 cardboard base
4 aluminum cans
6 yogurt cups
5 feet of string

12 sheets of newspaper
4 plastic bottles
5 feet of masking tape

## Design:

Draw a picture of the tower you want to build. Label all the materials in the design. Fill in the table below to show how much of each material you will need.

Materials
Quantity

| Cardboard base | 1 |
| :--- | :--- |
| Aluminum cans |  |
| Yogurt cups |  |
| String |  |
| Newspaper |  |
| Plastic bottles |  |
| Tape |  |

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## Testing:

For each trial, record whether or not your tower survived and how long it lasted. If you tower survived the whole trial, record 30 seconds.

| Trial \# | Wind Test |  | Earthquake Test |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Survived? <br> $(\mathrm{Y} / \mathrm{N})$ | Time (s) | Survived? <br> $(\mathrm{Y} / \mathrm{N})$ | Time (s) |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

## Sharing Results

Draw a picture of your final design below and explain why you think this tower design was able to survive the wind test and the earthquake test. If you made changes to earlier designs, explain why and how that affected your new tower.

