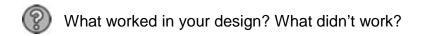
Engineers and Energy

- 1. Make a sketch of the roller coaster. Make sure to label the following:
 - a) Starting point, including its height.
 - b) Loops and make sure to say the size of the circle.
 - c) Curves, if you want to have any.
 - d) End of the coaster.

| ROLLER COASTER 1 | | | |
|------------------|--|--|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



What makes the marble move?

| Name | ! | | | | |
|------|---|--|--|--|--|
| | | | | | |

| 2. | Make a new | sketch of th | ne roller | coaster with | the change | es you need. |
|----|------------|--------------|-----------|--------------|------------|--------------|
|----|------------|--------------|-----------|--------------|------------|--------------|

| ROLLER COASTER 2 | | |
|------------------|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

- 3. What do you think will happen if you used a metal marble instead of the glass marble?
 - a) Nothing will happen
 - b) Marble will be too slow and fall
 - c) Marble will go faster and crash at the end of the coaster.
- 4. Test the roller coaster with a metal marble. Was your prediction correct?
- 5. What do you think will happen if you used a wooden marble instead of the glass marble?
 - a) Nothing will happen
 - b) Marble will be too slow and fall
 - c) Marble will go faster and crash at the end of the coaster.
- 6. Test your prediction. Was your prediction correct?