

Bumper Coaster with Hills!

No alligators,
guaranteed!

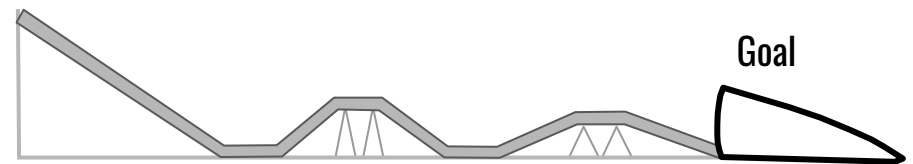
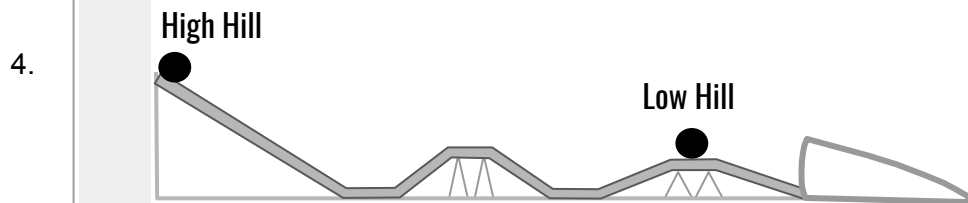
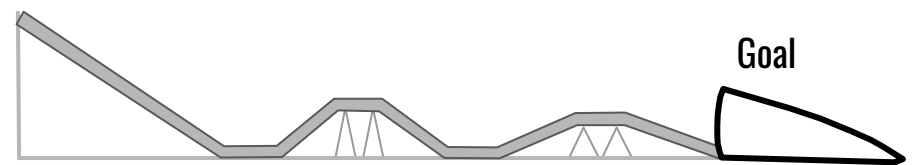
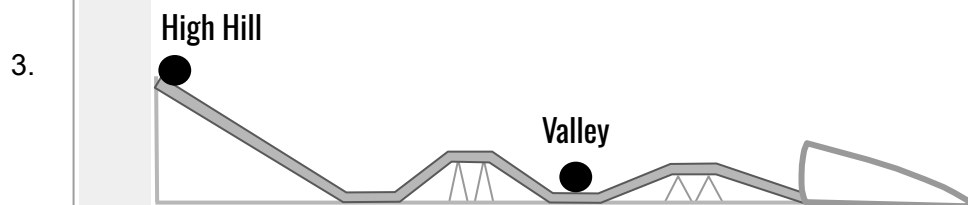
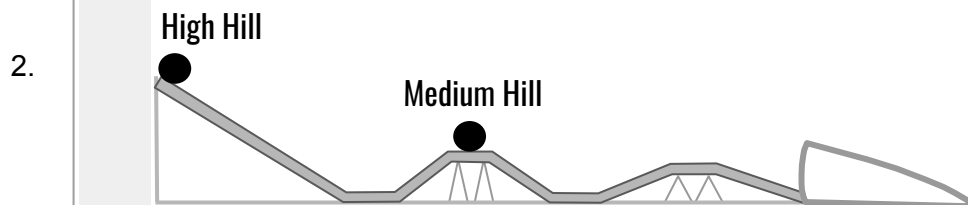
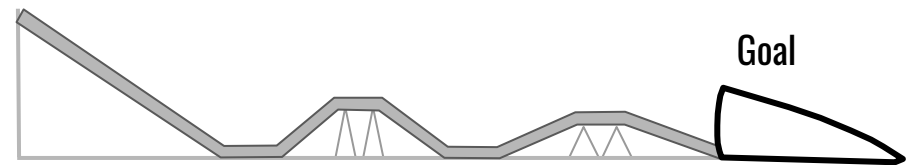
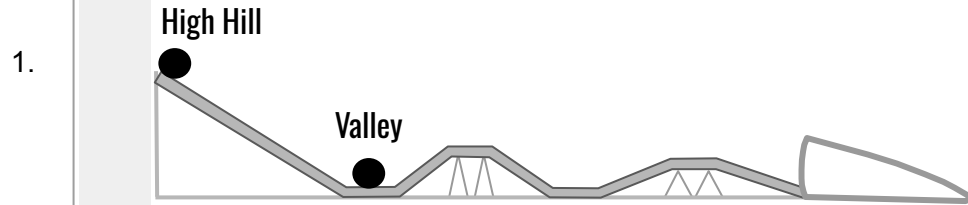
Name: _____

mystery science

Why is the first hill of a roller coaster always the highest?

Set up your experiments like this. (Each experiment uses 2 marbles. ● ● The Hill Marble always starts at the top. The Bumper Marble is in a different place each time.)

Do each experiment 4 times (do 4 trials).
Draw where both of the marbles ended up in your trial.



5. What pattern do you notice about the experiments where BOTH marbles made it to the goal? _____

6. How could you explain this pattern in terms of energy? _____