

Now that you have learned the physics behind rockets and getting our space ships into space, it's time for you to apply those laws of motion to a real-world experience.

(1) Which two laws govern space rockets and their escape from our atmosphere?

(2) How do those laws affect the ability of a rocket to escape our atmosphere?

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(3) Design a bottle rocket for maximum height. Your materials can include: a 2-liter bottle, a small weight for the "nose," plastic material for the fins, plastic materials for extending the length of your rocket, and anything else you decide to bring from home. Draw a sketch of the rocket you plan to build on the back of this sheet and explain why you opted for the design features you've included. [Note: we'll be building these rockets this Friday and launching them in the park, so make sure you put lots of thought into your design before Friday so that you can get right to work building.]

(4) How will your design achieve maximum height?

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