Webquest – Mousetrap Car

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ period:\_\_\_\_\_ date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part I:** Go to [www.google.com](http://www.google.com). Click on “Images” and type “Mousetrap Car” into the search box. Look at the different images that come up. Draw a picture of a Mousetrap Car showing where the force comes from that makes the car move.

**Part II**: Follow the links on the Doc Fizzix website to answer the following questions about Mousetrap Cars work.

1. A. How does a [mousetrap](http://www.docfizzix.com/mousetrap-faqs.shtml) powered car work? B. How is the string connected to the axle?

<http://www.docfizzix.com/how_work.htm>

A.

B.

1. Where should I [place the mousetrap for the best performance](http://www.docfizzix.com/design-help/answered-questions/q0018.shtml)?

<http://www.docfizzix.com/topics/construction-tips/Mouse-Trap-Cars/attaching-mousetrap.shtml>If you want **speed:**

If you are building a mouse trap vehicle for **distance:**

1. How long should I make my [vehicles lever arm](http://www.docfizzix.com/design-help/answered-questions/q0017.shtml) for best performance?

<http://www.docfizzix.com/topics/construction-tips/Mouse-Trap-Cars/adjusting-pulling-force.shtml>

-or-

<http://www.docfizzix.com/topics/construction-tips/Mouse-Trap-Cars/attaching-lever-arm.shtml>

If you want **speed** or power:

If you are building a mouse trap vehicle for **distance**:

1. How do you fix this: Mouse trap car suddenly [stops or slows quickly](http://www.docfizzix.com/design-help/answered-questions/q0019.shtml).

<http://www.docfizzix.com/topics/design-basics/MouseTrap-Cars/mousetrap-racers-friction.shtml>

1. [How do you fix this?](http://www.docfizzix.com/design-help/construction-tips/ct0002.shtml) My axle slides back and forth causing wheels to rub against the frame of the car, slowing or stopping the car.

<http://www.docfizzix.com/topics/construction-tips/Mouse-Trap-Cars/decrease-friction.shtml>

1.

2.

3.

1. How can I make my vehicle go [faster](http://www.docfizzix.com/design-help/articles/kb0002.shtml)? (explain 2 ways)

<http://www.docfizzix.com/topics/design-basics/MouseTrap-Cars/mousetrap-speed-basics.shtml>

-or- <http://www.wikihow.com/Adapt-a-Mousetrap-Car-for-Speed>

1.

2.

1. How can I make my vehicle go [further](http://www.docfizzix.com/design-help/articles/kb0003.shtml)? (explain 2 ways)

<http://www.docfizzix.com/topics/design-basics/MouseTrap-Cars/mousetrap-distance-basics.shtml>

1.

2.

1. A. What is friction? B. Is friction beneficial to a mousetrap car? Why or why not?

<http://www.docfizzix.com/topics/design-basics/MouseTrap-Cars/mousetrap-racers-friction.shtml>

 A.

 B.

1. Based on what you learned, what MODIFICATION will you make to your car?