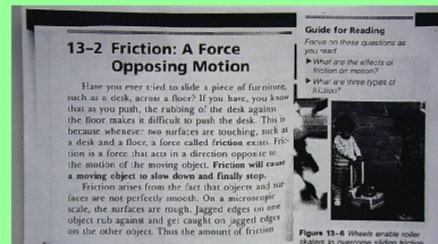


*You measured the force required to move a wooden block over various surfaces.*

- How this was related to friction? Why was this called your Friction Investigation?
- What did it show you about friction?

**Read the section beginning p.326 on Friction**

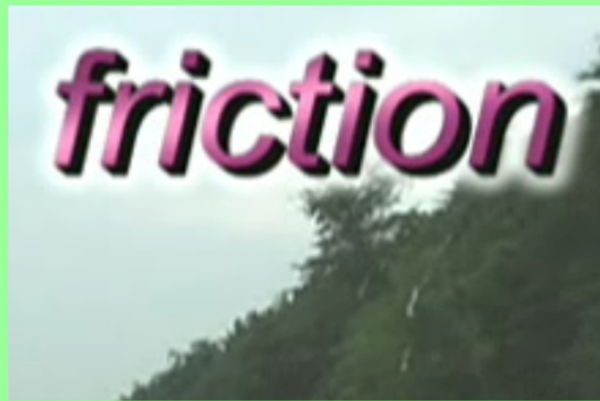
**Then briefly answer the 3 section review questions 13-2**



**(this is for your discussion of results)**

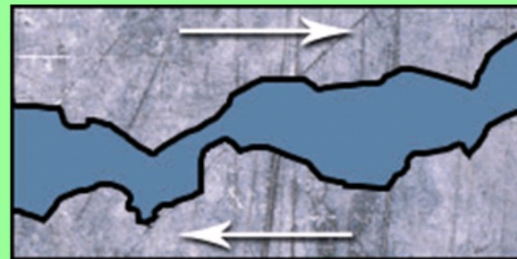
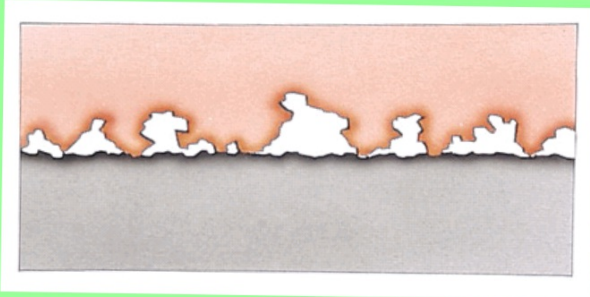


I can gather research about friction to help discuss my investigation results



I can gather research about friction to help discuss my investigation results

Friction: A force that acts on surfaces in contact to resist movement



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Does a rough surface always have more friction than a smooth surface?

## Force and the winter olympics



[http://www.nsf.gov/news/special\\_reports/olympics/](http://www.nsf.gov/news/special_reports/olympics/)



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**Graph** Make a bar graph to show your results.

**Conclusion/Results**



Figure 1

**A** Answer the investigation question and say if the data supports or does not support your hypothesis.

**P** Provide supporting high data

**P** provide supporting low data

**S** say how this data supports your conclusion. ( the block needed \_\_\_\_\_N more force to move on the \_\_\_\_\_ than the \_\_\_\_\_ )



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Discussion

1. Why do you think you got the results you did? Use your background experience and knowledge of science to explain reason for the differences in your data.
2. Report any variables not controlled and how they might have affected your results.
3. What would you do differently next time to make your investigation more valid and your data more reliable?
4. What are the limitations in your investigation( How might your conclusions be overgeneralised from limited data or bias?)
5. I wonder...? What might you test next time to learn more about friction on different surfaces?



Figure 1

friction

Word Bank

sliding friction

rolling friction

force

surface area

opposes

motion



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