

Guiding Question: What variables affect size of a crater made by a falling object?

Learning Goal: Graph and write a conclusion for the crater lab

Agenda

- 1) Daily Science Review-Conservation of energy II
- 2) Graph Data
- 4) Write CEE for crater Lab

Word of the day

Gravitational Potential Energy

Crater Lab day II

DSR Today



Make 2 Graphs for your data

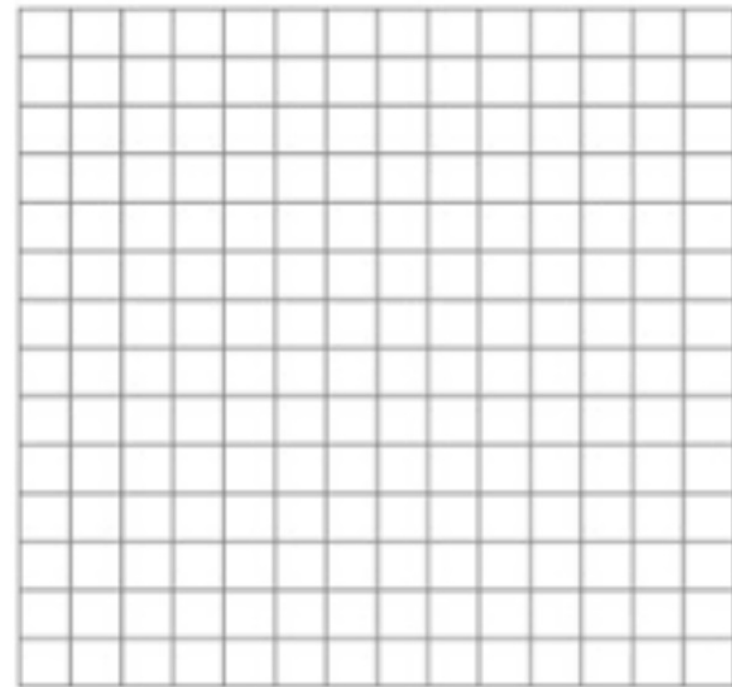
Make a scatter plot with a best-fit line.

diameter (cm)



Your independent Variable

depth (cm)



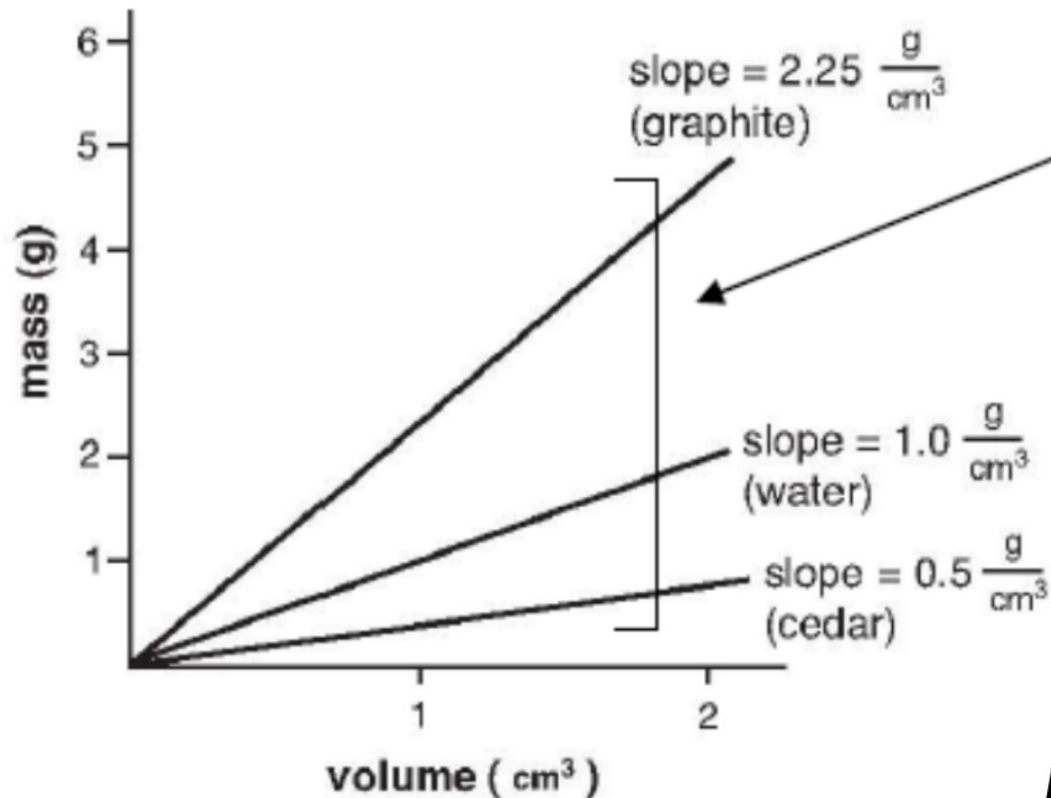
Your independent Variable

p. 61 and 62

7. Conclusion

Claim:

Look at the data and answer your experiment question. Look for relationships on your graphs.



What I see:

3 constant positive slopes that are not the same.

What it means:

Each substance has a constant density; graphite is the densest.

Example Claim: Graphite, water and cedar all of positive slopes but are not the same. Which mean as volume increases so does mass.

7. Conclusion

Claim: Look at the data and answer your experiment question.
Look for relationships on your graphs.

Evidence:

Write numbers from the beginning, middle and end of your graph that support your claim

Write 1 transition sentence that tells why those numbers are important

Read this information BEFORE writing your explanation

The gravitational potential energy of an object is dependent on two variables: the mass of the object and the height to which it is raised. There is a direct relationship between gravitational potential energy and the mass of an object. More massive objects have greater gravitational potential energy. There is also a direct relationship between gravitational potential energy and the height of an object. The higher that an object is elevated, the greater the gravitational potential energy.

When an object is falling due to the force of gravity, the potential energy is getting transferred to kinetic energy. The larger the amount of kinetic energy an object has when it hits the ground, the larger the crater.

Explanation

The reason why Summarize your claim happened is because.....

-Explain your claim. Be sure to use scientific concept you just read about

-NO NOT REPEAT YOUR CLAIM AND EVIDENCE

-Use the words: Potential Energy, Kinetic Energy, and transformation/transfer.

Errors: What errors were made because of the tools you used or the procedure you had to follow

NOT MISTAKES YOU MADE

Further Investigations:

What do you want to do next time? Explain why you want to do this.

When Done take a picture of your lab in showbie for Crater Lab assignment.

Do day 4 homework and any late homework until end of class