



Impact Crater Activity Worksheet

Name: _____

Date: _____

Part A: Background

Answers will be given during presentation.

What is the most common process affecting the surfaces of planets and their moons?

Can we see craters on Jupiter, Saturn, Uranus, or Neptune? Why or why not?

How many impact craters are on the Earth?	How many impact craters are on the Moon?

Why is there such a difference in the number of craters on the Moon and on the Earth?

Quiz: Where do you think this crater is from?

	My Answer	Final Answer
1)		
2)		
3)		
4)		
5)		



Definitions

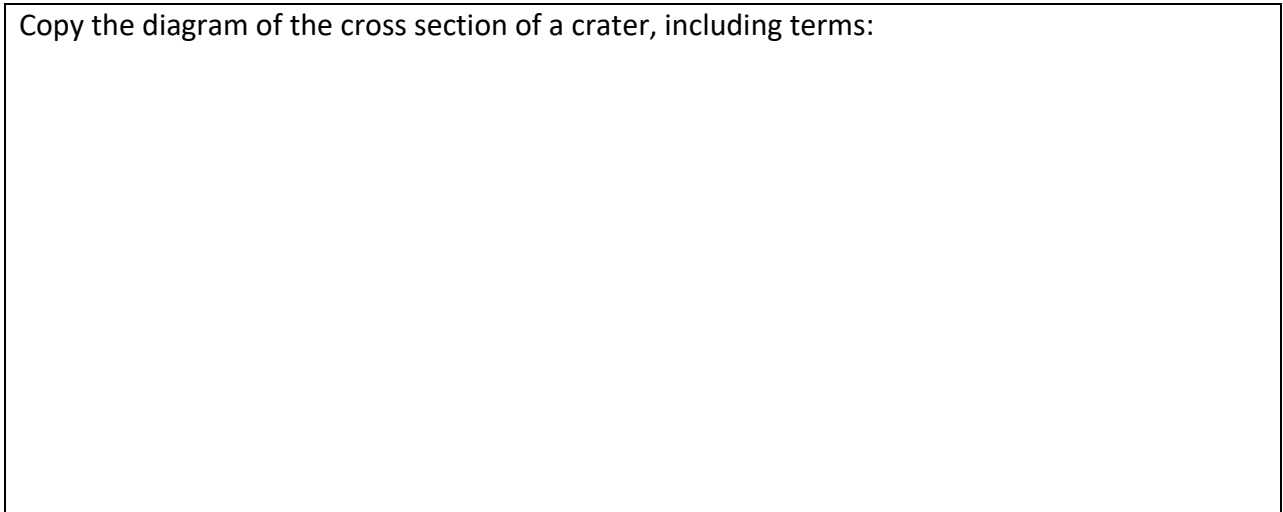
Meteoroid:

Meteor:

Meteorite:

Crater Diagram

Copy the diagram of the cross section of a crater, including terms:



Part B: Experiment Design

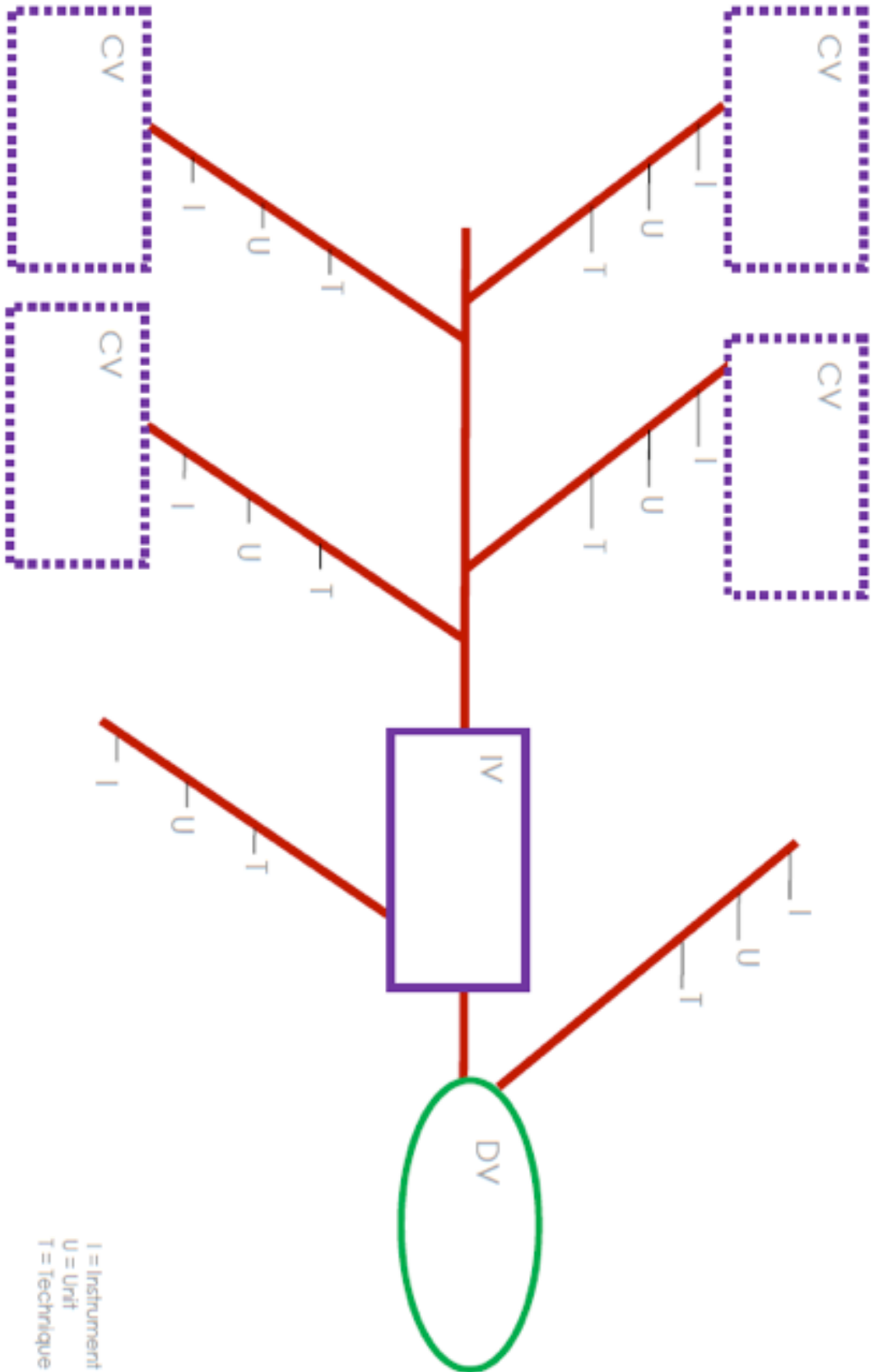
This will be done as a group.

List everything that can be measured in the demonstration (**dependent variables**), and what can be changed in the experiment (**independent variables**).

Things we can measure (Dependent variables)	Things we can change (Independent variables)

INITIATE AND PLAN

STEP 3: FISHBONE – EXPERIMENT ORGANIZER



I = Instrument
 U = Unit
 T = Technique



Western

Part C: Your Experiment (#1)

Our group will study changes in:



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_____ with respect to _____.
(dependent variable) (independent variable)

Create a hypothesis for your experiment using an “If... , then...” statement:
(e.g. “If the impactor is heavier, then the crater will be deeper.”)

Data Table

Trial	Independent Variable Values (What have you changed?)	Dependent Variable (What is the result?)
1		
2		
3		
4		
5		
6		



Western

Part C: Your Experiment (#2)

Our group will study changes in:



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_____ with respect to _____.
(dependent variable) (independent variable)

Create a hypothesis for your experiment using an “If... , then...” statement:
(e.g. “If the impactor is heavier, then the crater will be deeper.”)

Data Table

Trial	Independent Variable Values (What have you changed?)	Dependent Variable (What is the result?)
1		
2		
3		
4		
5		
6		



Part E: Discussion

1. Was your hypothesis correct? If not, try to explain why.
2. Were all craters the same shape? Why or why not?
3. If you were to do this lab again, what would you change?
4. How are our experiments different from what happens in space?
5. Why is impact cratering research important (what can we learn from it)?