

Name: _____ Date: _____ Period: _____

Sunset in a Bag Lab

Grading Rubric			Teacher remarks
Safety violations: -5 points	Question	10	
	Background Information	10	
	Prediction / Hypothesis	10	
	Safety precautions	10	
	Data table	25	
	Conclusion	25	
Procedure violations: -5 points	Errors & New Questions	10	
	Point deductions		
	Final grade	100	

Question: _____

Background Information:

Chemical Reaction- _____

Endothermic reaction- _____

Exothermic reaction- _____

There are several signs that a chemical reaction has occurred:

- _____
- _____
- _____
- _____
- _____

Safety Precautions



Hypothesis: If the substances chemically react when mixed together, then

Procedures:

1. Measure 20 mL of water in a graduated cylinder. Pour the water into a zip top sandwich bag.
2. Add 10 drops of phenol red or universal indicator to the water. Seal the bag and mix by gently squishing the bag. Observe and record any changes.
3. Measure 5 grams of calcium chloride into a weigh boat. Add it to the water, and gently squish bag to mix. Observe and record any changes

4. Measure 7.5 grams of baking soda into a weigh boat.
5. After the reaction is stable, add the 7.5 g. Of baking soda to the solution. Quickly reseal the bag. Mix the contents by gently sloshing the bag. DO NOT SHAKE! Observe and record any changes that take place.
6. The liquid produced is inert and may be cleaned up with water and a sponge. Rinse any remaining liquid down the sink.

Data & Observations:

Substances add to bag	Change observed	Explain what type of reaction took place and give evidence.
+ 20 mL water		
+10 drops phenol red		
+ 5g calcium chloride		
+ 7.5 g baking soda		

Conclusion Questions:

1. What happened to the shape of the water when poured from the graduated cylinder to the bag?
2. When you added the calcium chloride, what did the change in color indicate?
3. Was this an exothermic or endothermic reaction? Explain how you know.
4. When you added the baking soda, what did the change in color indicate?
5. Was this an exothermic or endothermic reaction? Explain how you know.
6. Why did the bag inflate?

Errors & New Questions:

Errors: _____

New Questions: _____
