

## Scored Student Responses for *Acid Rain*

### Score 3

Well, first of all if the chart wasn't there I wouldn't know what the 4 samples were. So they should have listed that. Also, it says to put them in vinegar but it doesn't say how much vinegar should be put in. It also says to place them in a container but it doesn't say what kind of container and how big. It also doesn't tell us the size of the samples.

This response describes at least three additional pieces of information that would be needed to accurately replicate the experiment: "...what the four samples were...how much vinegar should be put in...what kind of container...and the size of the samples."

## **Scored Student Responses for *Acid Rain***

### **Score 3**

In order to replicate the experiment, you would need additional information such as, how much vinegar was poured into each container. Additionally, you would need to know how large the containers were and how much/for how long the samples were rinsed with distilled water.

This response describes three additional pieces of information that would be needed to accurately replicate the experiment: "...how much vinegar was poured into each container...how large the containers were...and how long the samples were rinsed with distilled water."

## Scored Student Responses for *Acid Rain*

### Score 2

After reading the group's experiment, in order for me to replicate the experiment, the procedure would have to say exactly how much vinegar the group put into each container, also do we have to cover the containers after we place the samples into the vinegar. Without this crucial information, the whole procedure would have different results than if we were to have the correct information to conduct the experiment.

This response describes two additional pieces of information that would be needed to accurately replicate the experiment: "how much vinegar the group put in each container" and "do we have to cover the containers after we place the samples into the vinegar."

## **Scored Student Responses for *Acid Rain***

### **Score 2**

To replicate the experiment, the students should of said what the samples were, how much vinegar to use, and what the vinegar was suppose to do to the marble, limestone, wood, and plastic.

This response describes two additional pieces of information that would be needed to accurately replicate the experiment: "what the samples were" and "how much vinegar to use."

## **Scored Student Responses for *Acid Rain***

### **Score 1**

In order to replicate this experiment you will need to know how much vinegar to put into each container. You will need to know what to measure the mass with and you will also need to know why you are going to determine the mass of each of the four different samples.

This response describes one additional piece of information that would be needed to accurately replicate the experiment: "you will need to know how much vinegar to put into each container."

## **Scored Student Responses for *Acid Rain***

### **Score 1**

The group would need to write in the experiment to measure the mass with the vinegar. They would also need to describe how much vinegar is needed in the containers. Lastly you would want to know what the vinegar is suppose to do with the samples.

This response describes one additional piece of information that would be needed to accurately replicate the experiment: "describe how much vinegar is needed in the containers."

## **Scored Student Responses for *Acid Rain***

### **Score 0**

They would have to add a conclusion and a hypothesis to their procedure.

In the data table they should have made observations over the 24 hour period.

This response describes no relevant piece of information that would be needed to accurately replicate the experiment.

## Scored Student Responses for *Acid Rain*

### Score 0

They should of use something diffrent than vinegar also  
it should been longer the 24 hours. Last of all,  
they should've used different samples.

This response describes no relevant piece of information that would be needed to accurately replicate the experiment.