Name: **Date:** **Class:**

Biodegradable Packaging Worksheet

Research:
Watch the video and read the resources provided by your teacher and then answer the questions below.

1. Write down three things you learned about plastics:

2. Write down three things you learned about banana leaves:

Brainstorm:
How do you think banana leaves and/or other biodegradable materials could replace plastic packaging?

Instructions for testing materials:
For each material below:
1. Place the material over the top of the trash can or box and secure it to the edges with clamps or binder clips. (Note: One team member can also hold the material while another student applies weights on top.)
2. Once the material is placed securely, have one team member place the lightest weight on top.
3. Keep adding weight in increments until the material tears.
4. Record the last weight the material could hold without tearing below.

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Sample	Weight (lbs.)	Weight (kg)
Single layer of plastic		
Double layer of plastic		
Construction paper		
Banana leaf		
Banana leaf + plastic layer below		
Banana leaf + plastic layers on both sides		
Banana leaf + construction paper		
Banana leaf + construction paper + plastic layer		
Dry corn husk		

Plotting materials data:
Plot the data collected above by creating a bar graph. Put the sample name on the x-axis and the associated weight on the y-axis.

Reflection:

1. How did the testing experiment go? What worked and didn't work?

2. Based on your data, which layer was the strongest?

3. Based on your data, which layer was the weakest?

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4. How would you run the experiment if you redid this activity? Why?

5. What combination of layers would you test that didn't get tested? Why?

6. What other ideas could improve your results? Why?