**Lesson 1**

**Planning for Prototyping a Bioplastic Product**

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Description automatically generated

**Activator/Bell Ringer/Starter**

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Looking at your last time working with bioplastics, what properties will be important to include in your product? Create a list below and be prepared to explain why.

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| **My answers:** | **My classmates’ answers:** |

**Planning Your Bioplastic Inventions**

1. Re-join your labs groups from our last activity.
2. Evaluate the results from your Optimizing Bioplastic activities from our last class meeting. This information will help you determine the final version of the formulation of your group’s bioplastic product. To do this:
   1. Record the properties of the loops you created in our last activity, such as stickiness, hardness, brittleness, and flexibility.

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* 1. Note if any of the properties changed since you last observed them.

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1. Note the product you would have chosen to actually make (from module 1). List the properties that are important for this product, and why.

**Product:**

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| **Properties** | **Why important** |

1. Start the **Bioplastic Formulation** sheet below. Your goal today is to create a rough draft for a bioplastic formula that will result in the properties you need for your product.

As your brainstorm, think about how you might pitch your product. We will talk more about this later, so keep it in the back of your mind as you plan.

**Materials and Methods**

Materials for Formulation

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**Procedure for Formulation**

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**Ticket-Out**

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Looking at your materials and procedure, list one thing that may be a challenge to making your product tomorrow? Why might that be a challenge?

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| Your answer: |