

# PBL Middle School

## Recommendations and Modifications

### Common Recommendations/Modifications

#### Objectives:

*Providing common objectives gives focus for the learning task for the student and teacher*

#### **Overarching Objective**

- Students will create and evaluate a solution to solve the problem.

#### **Common Objectives**

- Students will define the **problem** to be solved.
- Students will **research** and evaluate different sources to gain background knowledge.
- Students will **brainstorm** ideas for the solution of the problem.
- Students will **design** a model solution to solve the problem
- Students will devise a method to **test** their solution.
- Students will **share** their findings with their peers.

#### Checkpoints:

*Checkpoints are a form of formative assessment used throughout the challenge and can be used to monitor active learning.*

#### **Specific Checkpoints:**

1. Describe the problem and what will be needed for a solution to be a success.
2. What specific information will you need to solve the problem and where can it be found?
3. What ideas for solutions did you and your group come up with during your brainstorming session? How did you decide on the best possible solution?
4. Describe in detail how you would test your solution.

#### Final Challenge Report / Reflection

*The final challenge report is used at the end of the PBL (summative assessment) after viewing the company's solution. This report reviews the steps taken to solve the problem and its solution. Students should create an argumentative product (essay, report, presentation) that covers the following:*

1. Present their solution to the company/board (Written/oral/etc).
2. Describes in detail how solution solves all aspects of the problem
3. Compares and contrasts student solutions with others (including the actual solution)

### **Student Report Questions**

1. Present your solution to the company/board that requested you to solve the problem. (Written/oral/etc).
2. In what ways does your solution solve all parts of the problem?
3. How does your solution compare to others?