Physics
Momentum Collisions Modeling Assessment

Choose 1 of the following sceneries
This is turned into your teacher

Phenomenon Assessment #1

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- Create model with before, middle and after of the collision
- Must have labels and relevant vocabulary
- What is the type of collision and why
- Predictions- why does the end result of the collision make sense? Use information our in class lab and PhET lab as references.

Phenomenon Assessment #2

- Create model with before, middle and after of the collision
- Must have labels and relevant vocabulary
- What is the type of collision and why
- Predictions- why does the end result of the collision make sense? Use information our in class lab and PhET lab as references.

Phenomenon Assessment #3

- Create model with before, middle and after of the collision
- Must have labels and relevant vocabulary
- What is the type of collision and why
- Predictions- why does the end result of the collision make sense? Use information our in class lab and PhET lab as references.

Rubric Criteria	4	3	2	1	0
<mark>Details</mark>	Communicates all unobservable connections in detail through the model. Input/output is fully shown with no irrelevant details.	Communicates all unobservable connections in detail through the model however assumptions must be made by the reader. Input/output is fully shown with no irrelevant details.	Partially communicates the unobservable connections with limited detail through their model. Input/output is attempted.	Attempts to communicate the unobservable through their model. But produces fragmented and disorganized ideas. .	Does not communicate anything unobservable. No relevant details to show the science behind the phenomenon.
<mark>Scientific Accuracy</mark>	The model accurately combines all necessary concepts to apply them to a new scenario.	The model is an accurate and complete representation of the concepts.	The model has small misconceptions in representation of most the necessary concepts.	The model has significant inaccuracies or is missing necessary concepts.	The model is not an accurate representation because no scientific expressed.

Momentum- I can accurately model and describe the conservation of momentum and impulse conceptually and mathematically.
4- Students can accurately determine types of collisions conceptually and mathematically with explanations. Student can also determine impulse in a variety of situations. Student uses all appropriate units and labels when representing the collision.
3- Student can determine types of collisions and impulse and show most understanding of collisions through explanations. Student makes errors including units, derivations and/or arithmetic or when modeling the collision.
2- Student can apply knowledge of types of collisions but makes errors in at least half of the problem through explanations or mathematically.
1- Student shows limited knowledge of collisions.