

## Balloon Car Design Activity

### Student Documentation for Project and Process

Suggested prompts for Step 5 - Observe, Improve, Iterate

| Balloon Car Design Project Documentation  |  |
|---|--|
| Describe or create a simple labeled sketch of the balloon car and cargo.  |  |
| <p>Does the design meet the required criteria and constraints?</p> <ul style="list-style-type: none"> <li>● Is the balloon car complete?</li> <li>● Do the wheels roll freely?</li> <li>● Does the car roll straight?</li> <li>● Does the car carry the desired cargo and not drop it?</li> <li>● Does the car reach the target?</li> </ul> |  |
| What are some of the physical principles you are learning about, and how do they connect to this activity? What is something that surprised you during your experimentation?  |  |
| What is something that surprised or challenged you during your experimentation? How did you work through it?  |  |
| Describe something that you want to improve on, or a problem you cannot yet understand  |  |

## Suggested prompts for Step 6 - Reflect

| <b>Balloon Car Design Project and Process Documentation</b>  |  |
|--|--|
| Describe or create a simple labeled sketch of the balloon car and cargo.   |  |
| <p>Did the balloon car perform as you expected?</p> <ul style="list-style-type: none"> <li>● Is the balloon car complete?</li> <li>● Did the wheels roll freely, the balloon deflate properly, the cargo stay on, and the car reach the target?</li> <li>● Did the balloon car meet the challenges it was designed for?</li> </ul> |  |
| What are some of the physical principles you are learning about, and how do they connect to this activity? What is something that surprised you during your experimentation?   |  |
| What is something that surprised or challenged you in creating the balloon car? How did you work through it?   |  |
| Describe the process you used to design the balloon car.   |  |
| Explain something that you liked about the design process.   |  |