

Dinosaur



The Assignment

A small production studio needs a dinosaur for a new film. Although they could use computer-generated images for the dinosaur, the studio has found that true-to-life, full-size moving models of dinosaurs have greater appeal.





The dinosaur must remain stationary; however, parts of it must move as it acts out various scenes.

Your task is to design and make a dinosaur model that has pneumatic movement and will work in a film scene.

Problem Solving Activity: _____

Name(s): _____

Date: _____

	 BRONZE	 SILVER	 GOLD	 PLATINUM
<p>GOALS</p>				
<p>Design Brief: Understand the problem, develop prototypes to solve it, test those prototypes and revise your design to make it better.</p>	<ul style="list-style-type: none"> • Our design met the goals or criteria defined by the activity. <input type="checkbox"/>	<ul style="list-style-type: none"> • We met Bronze • We tested our prototype multiple times. • We made at least one improvement. <input type="checkbox"/>	<ul style="list-style-type: none"> • We met Silver • We made at least two improvements. <input type="checkbox"/>	<ul style="list-style-type: none"> • We met Gold • We tested at least two different designs. • We picked the best design, tested it, and made several improvements. <input type="checkbox"/>
<p>Creativity: Come up with inventive and creative solutions to problems. Consider multiple solutions.</p>	<ul style="list-style-type: none"> • We started the activity and have at least one possible solution that looks reasonable. <input type="checkbox"/>	<ul style="list-style-type: none"> • We brainstormed two to three ideas. • We built a working model to solve the problem. <input type="checkbox"/>	<ul style="list-style-type: none"> • We brainstormed more than three ideas. • We built an effective model to solve the problem. <input type="checkbox"/>	<ul style="list-style-type: none"> • We brainstormed many ideas. • We built and tested prototypes for at least two ideas. • We built an original and effective model that solves the problem. <input type="checkbox"/>
<p>Collaboration: Work is shared effectively and the team encourages and helps each other.</p>	<ul style="list-style-type: none"> • We sometimes worked together well but some team members did more work than others or we needed help from the teacher to resolve some disagreements. <input type="checkbox"/>	<ul style="list-style-type: none"> • We generally worked together well, providing help and support to each other. • The work was shared fairly evenly among the group members. <input type="checkbox"/>	<ul style="list-style-type: none"> • We worked together well, providing help and support to each other. • The work tasks were shared evenly. • We addressed issues that arose. <input type="checkbox"/>	<ul style="list-style-type: none"> • We worked together unusually well, overcoming unexpected obstacles by working together as a team. • We actively helped and supported each other. • We addressed issues that arose with honest, constructive feedback. <input type="checkbox"/>

Notes: