

Winter Sled Design Challenge

Categories	1-3 (Bare minimum)	4-7 (Generic)	8-10 (Outstanding)
Creativity	<input type="checkbox"/> The design lacks originality and exhibits few, if any, creative and/or innovative applications	<input type="checkbox"/> Some unique, innovative, and creative concepts are incorporated in the overall design	<input type="checkbox"/> Unique, creative, and innovative approaches are fully incorporated into the design <input type="checkbox"/> Creative winter/holiday theme
Festivity and Artisanship	<input type="checkbox"/> There is little evidence of consideration of aesthetics and curbs appeal in the design. <input type="checkbox"/> Minimal festive decoration	<input type="checkbox"/> There is some evidence that aesthetics and curb appeal have been considered in the design. <input type="checkbox"/> Some festive decoration	<input type="checkbox"/> There is clear evidence that aesthetics and curb appeal are fully and effectively integrated into the design. <input type="checkbox"/> Exemplary festive design
Quality/Stability	<input type="checkbox"/> Construction is of poor quality and appearance, with little or no attention to neatness. <input type="checkbox"/> Construction is not self-supported	<input type="checkbox"/> Construction is somewhat neat and has appropriate quality and appearance. <input type="checkbox"/> Construction is partially self supported	<input type="checkbox"/> Construction is of excellent quality and exemplary appearance. <input type="checkbox"/> Construction is self supported
Paragraph explaining design process, (Materials, Construction, Troubleshooting), as well as the design itself	<input type="checkbox"/> There is missing information needed to comprehend the design process and construction methodology. <input type="checkbox"/> There is missing information needed to comprehend the design	<input type="checkbox"/> Paragraph is satisfactory and includes most components needed to illustrate the process. <input type="checkbox"/> Paragraph includes most components needed to comprehend the design	<input type="checkbox"/> Paragraph is well-written and includes all components needed to illustrate the process. <input type="checkbox"/> Paragraph contains a short but comprehensive explanation for understanding the design
Weight Test	<input type="checkbox"/> The sled is either unable to carry any weight or the weight that is carried is insignificant when compared to that of the sled's. Additionally, weight may not have been provided.	<input type="checkbox"/> The sled is able to carry a similar amount of weight to its own without sustaining major damages. The weight of the objects used are provided in the submission.	<input type="checkbox"/> The sled is able to carry 150% of its own weight while sustaining little to no damage. Additionally, the weight of any objects used are provided in the submission.

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Penalties	0	-10
Poses direct threats Poses fire hazard Utilized firearms Incorporates sharp knives	<input type="checkbox"/> There are no firearms, sharp knives, dangerous weaponry, and threats in/ part of the product.	<input type="checkbox"/> The final product incorporates a threat, firearm, or poses fire hazards. <input type="checkbox"/>
Poses an active threat (no mention of proper nouns or confidential information)	<input type="checkbox"/> The prop does not make alarming threats to any specific person or place.	<input type="checkbox"/> The prop makes mention of a specific person, places, or things and can be misconstrued as a feasible
Makes discriminatory remarks	<input type="checkbox"/> The final product does not make offensive remarks toward any group of people	<input type="checkbox"/> The final product targets a specific groups of people

Design and construct a festive sled design for Winter. Judging is based on creativity, professional appearance, and winter decoration.

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Compete against other NJTSA members this winter season and create a sled design! The winter challenge is to build a sled. The sled must possess dimensions equal to or greater than that of 14.5” long X 7.5” wide X 4.5” tall. Judging will be based on visuals, creativity and durability. To submit, create a folder with a video (.mov) that shows your sled holding a certain amount of weight, make sure to say the weight carried in the recording. To get the most points in the weight test, your sled will need to carry 150% of its own weight. In the drive, you should include a picture of a scale with your sled on it. Additionally, the weight should be clearly visible from the photo. Also include a paragraph explanation of your design process, materials used and any obstacles you may have faced in the format of a pdf. Submit all the items in one folder labeled “First/Last Name - Name of School - Winter challenge”. Submit entries to tsachall@tcnj.edu. Good luck!