2020-21 Long Term Problem Synopses

Tentative as of April 22, 2020. All Problems have an 8-minute time limit.

Problem 1: OMer the ROMER

OMers are always looking for new fun—and funny—experiences! Teams will design and build a ride-on vehicle that takes an OMer on an adventure in search of humor. The vehicle will use stored energy as it is propelled forward and in reverse. At each place, the vehicle and the OMer will react to something funny before the vehicle begins to travel to the next destination. Performances will also include the OMer making an unplanned stop to take a selfie, a creative physical representation of the selfie, and a vehicle-produced special effect. Divisions I, II, III & IV

Problem 2: Virtual Odyssey

Creativity is boundless as teams create a performance that includes a virtual reality world. As part of the world, they will design and build various technical effects, which include changing something that is two-dimensional into three-dimensional. During the performance, a character will unknowingly enter the virtual reality world where it will encounter a nefarious creature. It will learn the rules of the virtual world as the odyssey progresses. Finally, the character will escape the "clutches" of the creature and earn the last credit that allows it to journey back into the real world. The team will also create a special effect indicating to the judges and audience when the performance goes into virtual reality. *Divisions I, II, III & IV*



Problem 3: OMER and the Beanstalk

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Our favorite story books come alive when a special bean grows into a magic "beanstalk" that takes a youngster into a storybook land. There, a creative host will guide them around as they meet different storybook characters and encounter objects from selected stories that exist together in this mystical land. Teams will use ARM & HAMMER™ Baking Soda to create works of art relating to the stories and a set piece that appears to grow. *Divisions I, II, III & IV*

Problem 4: Wrecking Ball Structure II

Don't let your structure get wrecked! This year, structures must be strong enough to take a hit and keep on standing. Teams will design and build structures made of balsa wood and glue that hold as much weight as possible, while withstanding being hit by a wrecking ball. The structure will be hit from different sides of the tester one at a time in intervals during weight placement. So, the higher the weight held, the more sides will be hit. The performance will also include the construction of an original set and its creative destruction. Divisions I, II, III & IV

Problem 5: Superhero Socks: A Cliffhanger Beginning

Get ready for a story that begins with a cliffhanger "ending." A superhero is in peril and needs help to escape. Just as all hope seems lost, the Superhero puts on a pair of Super Socks that give the hero a new special power. The superhero uses the new power to escape and fend off an adversary who caused the cliffhanger situation. Teams will also create an extreme weather setting, a humorous character, and a sound effect that occurs whenever the character activates the Super Socks. *Divisions I, II, III & IV*

Primary Problem: Animals are People Too!

Everyone sees the world in a different way. Imagine if a pair of glasses let you see something completely different. In this problem, teams will create and present a humorous performance about a magical pair of glasses that when looked through, make people look like animals. Even more, people look like different animals to those who view them through the glasses! Teams will design a costume that transforms a character's appearance from human to an animal, and another that transforms an animal to a different animal. *Grades K-2*