# 2016-17 Long-Term Problem Synopses

#### **Problem 1: Catch Us If You Can**

This is your Odyssey, should you choose to accept it...your team will design, build, and run vehicles from a multi-level Parking Garage to a secret meeting place without being stopped. Vehicles will travel different routes to reach the same destination. During their Odyssey, the vehicles will do something that prevents them from being followed. The performance will include the reason for the meeting, someone that wants to prevent the meeting, a simulation of a scene taking place inside a vehicle as it travels, and a soundtrack to accompany the vehicles' travel.

DIVISIONS I. II III & IV

#### **Problem 2: Odd-a-Bot**

For this problem, teams will create a humorous story about a family that brings home an "Odd-a-Bot." Instead of being programmed to perform tasks, this Odd-a-Bot robot learns from watching others. Teams will design, build, and operate an original robot that demonstrates human characteristics when performing tasks. In the performance, the Odd-a-Bot will move and learn human actions from watching characters perform activities such as household chores, creating art, and dancing. The Odd-a-Bot learns more than it was expected to learn, and will confuse its actions with humorous results.

Divisions I, II & III

## Problem 3: Classics... It's Time, OMER

The future and the past collide in this problem about important works of art – both existing and yet-to-be-created. Teams will create and present an original performance about time travelers looking to discover the inspiration for great works of art, little did they know – it was OMER every time! The travelers go back in time — twice into our past and once into our future. They will see OMER inspire two classical artists and a team-created artist from our future. The performance will include how the three works of art positively impact the world, a visual and audible effect that indicates when time travel is occurring, two re-creations of the classic works of art selected from a list, and a team-created work of art.

DIVISIONS I, II, III & IV

#### Problem 4: Ready, Set, Balsa, Build!

Creativity can be defined by using only what you have to get a job done. In this problem, teams will design, build, and test a structure made of only balsa wood and glue that will balance and support as much weight as possible. The structure must include sets of balsa pieces of predetermined sizes and quantities as listed in the problem. Some sets must be parts of the structure while others, if incorporated, will receive additional score — the more sets of pieces used, the higher the score! Teams will present a performance with a theme about using what's available and that incorporates weight-placement and assembling original team creations.

Divisions I, II, III & IV

### **Problem 5: To Be Continued: A Superhero Cliffhanger**

Creativity is being taken away from the world, and it is up to Odyssey teams to rescue it! Teams will create and present a humorous performance about an unexpected superhero that encounters three different situations where it must save creativity in some way. The superhero will change appearance when it displays its superpowers and go back to blending in with society when not. The performance will also include a clumsy sidekick, a nemesis character, a choreographed battle, and a cliffhanger ending.

Divisions I, II, III & IV

### Primary: Movin' Out!

Teams will create and present a performance about a group that is moving out of one place and into another. In one scene, team-created props and scenery will make up the first setting. To transform into a new setting, team-made devices will move the scenery and props to a new location. Everything in the setting for the next scene must be made from the transported items. The performance will also include a humorous Moving Character, a reason for the move, and a lost item that is rediscovered in an unusual place.

Grades K-2