

# 2007-08 Long-Term Problem Synopses\*

## Problem 1: **Odyssey Road Rally**

This problem combines two popular activities — Road Rallies and Sporting Events. Teams will design, build, and operate an original vehicle, which they will drive in a road rally that has four checkpoints. At each checkpoint, the vehicle will compete in a sports-related event. The team will choose three of the events from lists in the problem and will create an original sports-related event for the fourth checkpoint. The team will also develop a theme for its road rally.

**Divisions I, II & III. Cost limit: \$145.**

## Problem 2: **DinoStories**

What might have happened to the dinosaurs that existed so many years ago? In a humorous performance, teams will present their original theory of what caused the dinosaurs to become extinct. The performance will include a dinosaur, a replica of the same dinosaur, an animal that is not a dinosaur, and a technical simulation of the team's "extinction theory." At least part of the performance will take place in a setting from the Triassic, Jurassic, or Cretaceous periods.

**Divisions I, II, III & IV. Cost limit: \$145.**

## Problem 3: **Classics . . . The Wonderful Muses**

In Greek Mythology, muses were the source of inspiration for the creative works of artists and scientists. The team's problem is to create and present an original performance that includes one of the nine Greek muses. The Muse will inspire two people during the performance: (1) a historical person who made an actual positive contribution to the world, and (2) an original, team-created person who tries to make a positive contribution to the world. The Muse will use the art form attributed to her during two "moments of inspiration," when all the characters in the scene, except the Muse, will "freeze." The team will also create two original works in that art form to include in the performance.

**Divisions I, II, III & IV. Cost limit: \$125.**

## Problem 4: **Tee Structure**

The team's problem is to design and build a structure using only balsa wood and glue. The team will test the structure by having it support weights that are balanced on golf balls without touching anything else. The team will receive score for the amount of weight the structure holds during testing and bonus points for each golf ball used to support the weights.

**Divisions I, II, III & IV. Cost limit: \$140.**

## Problem 5: **The Eccentrics!**

This problem requires teams to create and present a humorous performance about three Eccentric Characters that demonstrate odd behavior, peculiar mannerisms, and unconventional dress. The performance will include a team-created "problem" within, or involving, an Earth system — the atmosphere, biosphere, cryosphere, geosphere, or hydrosphere. The Eccentric Characters, which seem to be misfits, will solve the problem. As a reward, a celebration is held in their honor and they end up launching a new fad. This problem is sponsored by NASA.

**Divisions I, II, III & IV. Cost limit: \$125.**

## Primary: **Rude Awakenings**

This problem requires teams to create and present a humorous performance that includes a character that keeps waking up in a different time and/or place from where it fell asleep. This will happen at least three times before the character returns to where it started and something or someone stops the character from "traveling" in its sleep. The performance will also include a pet, a helpful character, and narration.

**Grades K-2. Cost limit: \$125.**