

2013-14 Long-Term Problem Synopses

All problems have an 8-minute time limit.

Problem 1: Driver's Test

For this problem, teams will design, build, and drive a vehicle that will travel a course where a student driver attempts to complete tasks in order to pass a driver's test. The vehicle will travel using one propulsion system and then travel in reverse using a different propulsion system. The vehicle will encounter a directional signal and have a Global Positioning System (GPS) that talks to the driver. The team will create a theme for the presentation that incorporates the vehicle, a driver's test, a student, and the talking GPS.

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

Problem 2: The Not-So-Haunted House

The team's problem is to create and present an original performance that includes a "pop-up-style" not-so-haunted "house" where four special effects take place. The intent of the special effects will be to scare others, but they will produce a different result instead. The performance will include at least one character that experiences the special effects and a narrator who relays the experiences to the audience. It will also include a surprise ending. The special effects will be scored for originality and engineering.

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

Problem 3: It's How We Rule

In this *Classics* problem, teams will re-create a King's Court from history and make their own Royal Court set in an original kingdom at a different time and place. The Historic Court will issue a decree that fits in with its history, while the team-created Royal Court will issue a decree that changes an everyday behavior for the people in the kingdom. The Historic court will be composed as the team wishes, but the original Royal Court will be made up of a leader, a minstrel that performs a song while playing a team-created instrument, and a jester that makes fun of the leader. The performance will include puppets and a Peoplet (a person portrayed as a puppet), and will be scored for humor.

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

Problem 4: The Stackable Structure

Teams will design and build a structure made up of separate components stacked on top of one another. The structure components will be made of only balsa wood and glue, and will be tested by balancing and supporting weights after they are stacked. Teams will be scored for the number of components they use in their final structure. Before they are stacked, the separate components will be integrated into an artistic representation of Earth. The team will include the stacking of the components, placement of the weights, and Earth into the theme of its performance.

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

Problem 5: Seeing is Believing

In this problem teams are to create and present an original performance about a community that feels threatened by something in a location it has never visited. The community townspeople will use a creative method to select one or more Travelers to visit and explore the location. While at the location, a Traveler will use a means of communication to send a message home to convince the community that there is nothing to fear. The performance will also include a narrator character, two rhymes about the travels, and a moving set piece.

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

Primary: The World's First Arts Festival

The team's problem is to create and present an original humorous performance about a prehistoric art festival. The festival will include artwork, dance, music, song, and — of course — a team-created audience to experience it all. The team will also create a backdrop that is a replica of a cave painting.

Grades K-2. Cost limit: \$125