

# 2004-2005 Long-Term Problem Synopses

## Problem 1: Stunt Mobiles

The problem is for teams to design, build and run two original Stunt Mobile vehicles that will travel from behind Start Lines and over five obstacle courses. The Stunt Mobiles will operate on different power systems, and they will overcome different obstacles to cross a finish line and break balloons.

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

## Problem 2: In Your Dreams

For this problem, teams will create a performance that includes a dream that, at times, will be cheerful, non-sensical, and nightmarish. The nightmare will include a monster, designed and built by the team, that changes in appearance and performs various tasks, including two designed by the team. Parts of the dream will include sounds as well.

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

## Problem 3: Classics . . . Get The Message?

Teams will present an original performance that includes a story told three times, each time using a different method of communication: a primitive method, an evolved method, and a futuristic method created by the team. The team will create signals that represent a stage in a process of the Earth system, which they will display for each communication method. The presentation will also include a narrator or host and a stage set.

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



*This problem is sponsored by NASA.*

## Problem 4: Crazy Columns

Teams will use only balsa wood and glue to create a structure that will be tested for its ability to balance and support as much weight as possible, but here's the twist: The parts of the structure do not have to be connected, although they can be if the team wishes. The "structure" will rest on surfaces at three different heights, but the top of the structure will be at least 8 inches from the tester base. The two outer surfaces will be 10½" apart. Placement of the third surface will be determined by the team, but within a specified area.

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

## Problem 5: Laugh-a-thon

In this problem, teams will create and present a humorous performance that has team members portraying a puppet, a mime, and an image and its reflection. The performance will also include a comedy routine or humorous sketch and the effect of something happening much faster than usual. Teams will add two humorous features of their own that are meant to entertain others.

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

## Primary: Fable-us!

For this non-competitive problem, teams will create and present a performance that includes an original fable that has a moral. There will be no "humans" in the performance, only animals and inanimate objects with human characteristics. The moral will teach a lesson or provide advice to help one or more characters in the performance.

*Grades K-2. Cost limit: \$50.*