



2006-07 Long-Term Problem Synopses

All problems have an 8-minute time limit.

Problem 1: Tag 'Em

The team's problem is to design, build, and run one, two, or three small vehicles that will make trips and get "tagged" within a Tagging Zone for score. The team will create tags and a system to remotely place them onto the vehicle. To receive maximum score for a trip, a vehicle will have one tag successfully placed on it and will continue traveling into a Home Area. The team will present a performance that incorporates the running and tagging of the vehicle.

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

Problem 2: The Large and Small of It

This problem requires teams to create and present an original performance that integrates team-created Small Pages and Large Versions that change appearance. The method used to make the Large Versions change appearance will simulate the methods used to change the Small Pages. One of these methods must be technical. The Large Versions will serve as stage sets for the performance. During the performance a character will also appear to dramatically change in size. This effect will be created using technical means.

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

Problem 3: Classics . . . Around the World in 8 Minutes

In this "classics" problem, teams will create and present a performance that includes a "Traveler" character on a trip around the world. During the trip, the Traveler will stop at three locations on Planet Earth that have different geographic characteristics. Two settings — one polar, the other different — will be actual places, and the third one will be an undiscovered location created by the team. The performance will include an explanation about why the character takes the trip and the reason it stops at each location.

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

Problem 4: Out of the Box Balsa

The team's problem is to design, build, and test a structure made of balsa wood and glue that will balance and support weights. The team is allowed to use materials other than balsa wood and glue to assemble the parts of the structure. The structure will be designed to fit completely inside a box that is smaller than the assembled structure. When competition time begins, the team will remove the parts and assembly materials from the box, creatively assemble its structure, and test it by placing weights onto it.

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

Problem 5: I'm Only Thinking of You!

For this problem, teams will create and present an original humorous performance that includes a Self-Centered Character (SCC) and a surprise. The SCC will take advantage of others three separate times. Two of the three times it will successfully convince others that it is being helpful and will say, "I'm only thinking of you," or something similar. The third time it will fail to deceive others into believing that its self-centered behavior helps them and its true nature is revealed.

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

Primary: The Time Capsule

The team will create and present a performance about a group of explorers that uncover a time capsule filled with five unusual items made by the team. The explorers will try to figure out what these odd items are and how they were used. They won't always agree with each other! The exploration may take place anywhere in any time period.

Grades K-2. Cost limit: \$115.