2005-2006 Long-Term Problem Synopses

Problem 1: The Great Parade

Teams will design, build and drive a vehicle that will be used as three different floats in a parade. The vehicle will leave a Back Lot decorated as the first float, travel around a parade route and return to the Back Lot. There, it will change appearance into another float and travel the route again. It will repeat this one more time. One of the floats will have a technical feature. The parade will conclude with a Spectacular Celebration, which will also include a technical feature. The team will create a theme for its parade and include a featured character in its presentation.

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

Problem 2: Tech Transfer

This problem requires teams to create and present an original performance that includes the use of a technical device that extends into different areas to move items. The team will design, build and operate the device, and create the items. The team will operate the device in the performance, which will incorporate the way the device is used in a theme about some type of transfer.

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

Problem 3: Classics . . . Ancient Egypt

For this problem, teams will create and present an original performance that includes a scene that takes place in ancient Egypt. The presentation must include either a pharaoh, king, or queen, and ancient Egyptian works of art/artifacts created by the team. The performance will also include an explanation abut the construction of an ancient Egyptian architectural structure and a plot twist.

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

Problem 4: Geometry Structure

The team's problem is to design and build a structure of balsa wood and glue. The team will build geometric shapes into the structure's design and attach colored paper to the shapes. The type and number of required shapes varies according to division. The team will test the structure for its ability to balance and support as much weight as possible. The team's stage set will include some type of replica of the structure.

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

Problem 5: The Jungle Bloke

Teams will create and present a performance about a "Bloke," a person who has the ability to talk with and understand animals from a jungle. Part or all of the performance will take place in a jungle selected from a list. The animals will tell the Bloke about a problem that exists there and get the Bloke to help. The animals will also help the Bloke in some way. The Bloke will convince someone else that he has the ability to talk with the animals. The presentation will include an original song and dance.

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

Primary: Space Trek

For this non-competitive problem, the team will create and present an original performance about traveling through outer space. On its trip, the team will overcome an obstacle or difficulty, encounter another space traveler, and discover an unknown planet. The team will name the planet and retrieve two samples using a team-created device.

Grades K-2. Cost limit: $50.