

CLAY BOATS

Description:

Students will construct a clay boat from a wad of clay with a total mass of 25 grams. Students will then float their clay boat in a tub of water. Plastic centimeter cubes (mass of 1 gram each or other objects of uniform weight) will be loaded in the hull of the clay boat one at a time until the boat sinks.

Number of Participants: 2

Approximate Time: 30 minutes

The Competition:

1. Clay boats must be built on site with the clay provided by the Science Olympiad officials. Each team will be given the same amount (25 grams) of unused and unworked Plasticine clay.
2. Participants may not practice filling the boat during the 10-minute building period. Teams will be timed during this period for purposes of tiebreakers. All boats must have a dry start. The plastic cubes or other objects must be dried between testing trials. All students will be given dry objects to load.
3. During the test period, team members will load their own clay boats. Loading some objects before floating the boat will be allowed; but if it sinks when launched, the team will receive a score of zero. All objects loaded after launching will be added one at a time with officials counting the objects as they are loaded. All boats must be loaded within the 10-minute test period.

Scoring:

The number of objects on board the clay boat as the boat sinks is the team's score. The highest score wins. In case of a tie, shortest elapsed time during the construction period will determine the final score.

