### 3rd Grade Forces (30 Minutes - Based on Team Schedule)

**Description:** This event tests participants' knowledge of Forces. This event has a written test and may/may not include "hands-on" stations.



# Participants per Team: 2

### **Spirit of the competition:**

➤ It is a rules violation if coaches, parents, mentors, or spectators enter the competition area or communicate with the team members at any time during the competition. Violation of this rule will place the team below all other teams.

<u>Teams need to bring:</u> Pencils. Optionally a 4-function calculator.

**Safety Requirements: None** 

# **The Competition:**

Students will take a written test to answer topic questions that may include but not limited to

- Definition of force
- Types of forces Contact & Action-at-a- distance forces
- Newton's Laws of Motion
- Free body diagrams
- Net force calculation

#### **Possible Resources:**

Division A will not release previous tests, or the exact resources used by the Event Supervisor or test writer for any events. The listed resources are meant as a starting point. It is up to the competitor to research further.

• <a href="https://www.physicsclassroom.com">https://www.physicsclassroom.com</a>