Anatomy - Respiratory System (30 Minutes - Based on Team Schedule)

Description: This event tests participants' knowledge of the Respiratory System. 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.

Teams need to bring: Pencils and optionally a four-function calculator.

Safety Requirements: None

The Competition:

Students will take a written test to answer questions on the human respiratory system. The topics will include but are not limited to:

- Anatomy of the respiratory system
- The process of respiration Pulmonary ventilation, Gas exchange, Transport of gas, Patterns of breathing, Regulation of respiration, Abnormal ventilation
- Spirometry, lung volumes & capacities
- Effect of exercise, high altitude, and aging on respiratory system
- Respiratory Disorders: Differentiate Restrictive & Obstructive Lung disease, Asthma, COPD, Respiratory Syncytial Virus (RSV), Common Cold and Pneumonia.

Scoring:

- Points will be awarded for each correct response.
- Ties will be broken by the accuracy or quality of answers to select questions chosen by the event leader prior to the competition.

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.

- How Lungs Work | American Lung Association
- <u>Respiratory system | Canadian Lung Association</u>

