

PENTATHLON

1. **DESCRIPTION:** Teams will compete in an academic pentathlon that will demonstrate the team's overall understanding of the five major Science Olympiad content areas.

NUMBER OF PARTICIPANTS: 4

APPROXIMATE TIME: 10 minutes

2. **THE COMPETITION:**

- a. The goal is to complete the five sets of physical and academic challenges as quickly as possible. The **lowest overall time** to complete **all five sets of challenges** will determine the winners.
- b. **Each** team member will participate individually in **one of the** four sets of physical and academic challenges as a relay ending in one group physical and one group academic challenge. Teams may be asked to pass a baton or other object from one member to the other **or just tag the next member**.
- c. Event supervisors will create the physical and academic challenges that are the same for all teams.
- d. Appropriate athletic attire (shorts, sweats, athletic shoes, etc.) should be worn. No one will be allowed to participate without some form of protective footwear.
- e. If held outdoors, the competition will occur in all but hazardous weather conditions.
- f. The contestants must stay on the course specified by the judges. Physically handicapped contestants must complete the academic challenges but may use a substitute for the physical challenges.
- g. Timing begins when the first team member starts and ends when the team completes **both** of the group challenges. Timing will be **recorded in hundredths** of a second.
- h. Physical challenges **may be visible if space is available**. Students may choose the order in which they will participate in the relay based on the physical challenges. The physical challenge must be successfully completed before moving on to the academic challenge. Example: a bean bag must go through a ring. Students could start at approximately 3-5 meters and advance **one** meter for each succeeding throw or toss until the task is successfully completed. Ploys to circumvent the challenge, such as tossing the bean-bag short distances to move closer to the target before attempting the target, will result in a repeat of the series.
- i. Academic challenges will be **activities** representing the **six Science Olympiad content areas** (see event rotation chart). **Academic challenges or content areas will not be announced**. Each academic challenge **must be** successfully completed/answered correctly or an established maximum time expires (e.g., two minutes). Then the student **tags or** passes the carried object to the next team member.
- j. The last challenges (physical and academic) must involve all four team members. **The group academic challenge will also be timed for tiebreaking purposes but will be counted in the overall time**.
- k. **There is no need to keep track of points for correct answers or task completion as the only score will be the time taken to complete all of the academic and physical challenges**.

3. **SCORING:**

- a. The lowest team **overall** time in **hundredths** of seconds will determine the winners.
- b. For fewer than 4 team members there will be a 2-minute penalty added to the time for each missing team member. Participating team members will be responsible to complete all challenges.
- c. Ties will be broken by the lowest group academic challenge time. The team with the lowest time will be ranked above the other **tied** teams.

SAMPLE CHALLENGE COURSE FOR PENTATHLON

The four-team members are dispersed to the course. Contestants begin behind their designated place. After successfully completing his or her assigned physical and academic challenges, each team member must pass an object (big air or water balloon/broom/big teddy bear) to the next team member. The successful object pass initiates the next team member's start. At the completion of each team member's challenges they proceed to the group challenges site where the final challenges will require all four members to work as a unit to complete both challenges.

- **Examples of Academic Challenges:**
 - Find the density of a solid.
 - Rank order five minerals by hardness.
 - Match 5-6 specimens with phylum.
 - Sort planets in order of size or location.
 - Sort liquids in order by pH.

- **Examples of Physical Challenges:**
 - Bean bag, ping-pong thrown through a ring or basket.
 - Basketball dribbled a given distance or path.
 - Ride a tricycle carrying ping-pong with a spoon.
 - Golf ball carried on a spoon over a given distance.
 - Jumping rope twenty times.