

Name/Title: Oxygen Cycle

Purpose of Event: To have students understand and experience the concept that when we exercise our bodies work harder. This makes our hearts beat faster requiring more oxygen that causes us to breathe harder.

Prerequisites: Students need to be comfortable running in a designated pathway in the gym.

Suggested Grade Level: K-2

Materials Needed: 1. Three objects, per student, which are small enough to carry in one hand. (i.e., beanbags); 2. Two big buckets or four small ones that will hold all the small objects.; 3. Three large signs. One should say, "Mouth", one should say, "Heart", and one should say, "Muscle".; 4. About 30 cones.

Description of Idea

Students run clockwise around a track in the gym, pretending they are the blood that carries oxygen through the body.

* First of all, students go to the "mouth" station where they take three big breaths and pick up an object that represents oxygen (i.e., beanbag).

* Secondly, they run to the "heart" station and contract their whole body (see the explanation below), pretending to be a heart.

* Third, they run to the "muscle" station where they put their beanbag into a bucket and perform a designated exercise (i.e., 10 jumping jacks).

* Fourth, the students have "run out of oxygen" and must go back to the mouth to get more.

Remind students that they must stay in the track because it is like the arteries in the body.

Teach the students that when they exercise they begin breathing harder, and that when we breathe we take oxygen into our bodies. (Have everyone take three deep breaths.)

Remind the students that when they exercise their heart beats faster, which makes the oxygen go through their whole body. (Have everyone simulate the heart pumping by having them stand with their arms up and then contract their whole body. An alternative to this is to have them lay on their back while they contract their whole body. Say, "Oxygen helps me exercise.") Ask them if they can think of any examples of exercise. (They'll probably say jumping jacks, pushups, etc.) Then have everyone perform 5-10 of that particular exercise.

After they understand what to do at each station, ask for a couple of volunteers to run the course so everyone can watch.

You can vary the number of breaths they take at the mouth, the number of compressions at the "heart" station, the number or type of repetitions at the "muscle" station, or the type of

movement to use when moving through the "artery" (the running path).

Teaching extension for older children: As children understand how the blood flows within in their body, set up cones inside the "artery" to represent cholesterol. Cholesterol buildup makes it hard for the blood to flow freely through the arteries. Students cannot go through the cones or over them; they must go around them.

Assessment Ideas:

During the debriefing time, hold up a beanbag and ask, "What does your body need so that it can perform exercise?" Or, right after they get done running, ask, "A lot of you are breathing hard. Why is that?" Point out that running, jumping jacks or pushups are examples of exercises that use their muscles. Ask the students what their muscles need to work hard?

Have the students spread out. Call out the words, "mouth", "heart" and "muscle" in random order, and when they hear the word they perform the activity for that station.

Adaptations for Students with Disabilities:

Peer-pairing as needed.

Submitted by **Ben Malan** who teaches at Circle Rock Preparatory School in Chicago, IL. Thanks for contributing to PE Central! **Posted on PEC: 9/6/2006.**

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