

Lesson Plan Title: What's Your Pulse Rate? Instructor:

Suggested Total Time for Lesson (minutes): 40 minutes (1 day)

Content Focus - What Will Students Learn? (Content Skill Sets)

Health Science

0972.HE.0715.36 Apply procedures for measuring and recording vital signs including normal ranges

Materials and Resources- What do you need to assemble and prepare before the lesson?

Materials:

- Stethoscope (s): purchase a set for the class, borrow from a CTE health science program, or local nursing program, or ask students to bring from home if available.
- Stopwatch, clock or watch with a second hand

Resources:

- Parts of a Stethoscope
- Top 10 Stethoscope Facts | Education Zone | DS Medical
- Worksheet: What is Your Pulse Rate?
- How to Use a Stethoscope

Lesson Outline: What learning activities will your students do?	
Time	Sequence/Description of Learning Activity
10 minutes	 Get Started/Explain: Vital Signs Lesson should be done prior to this lesson This activity will allow students to listen to a heartbeat (if stethoscopes are available), take a pulse and calculate a pulse rate at rest and after exercise. Explain how to find a pulse Locate pulse by lightly pressing two fingertips on the underside of the wrist just below the base of the thumb. Pulse can also be found on the neck; place two fingers on the Adam's Apple and slowly slide fingers upward to the side. Ask students: What is causing the pulse that you are feeling? Explain how to take a pulse rate The rate is the speed at which something happens. Pulse rates are usually measured in how many beats per minute. The pulses that you're feeling correspond directly to the number of heartbeats. Since it can be difficult to count the number of pulses that occur in one minute, you are going to count the number of pulses that occur in 15 seconds and convert it to 60 seconds (1 minute) Because pulse rates are usually measured in minutes, it is very difficult to compare our
	results with anything else. Therefore, you must convert our results to the number of heart beats per minute. This can be done by multiplying the number of pulses in 15 seconds by 4. This lesson is relevant to a HOSA Future Health Professionals competitive event
30 minutes	Discover/Engage/Practice: Show students a video on "stethoscope basics." In groups of two, use the worksheet "What is Your Pulse Rate" Students will: Listen to heartbeat Take a pulse Calculate a pulse rate at rest, during exercise and after exercise Complete a lab report (optional)
	 Check for Understanding/Summarize/Close: Were students able to find their own pulse and calculate their heart rate? Ask how did the heartbeat sound (if using a stethoscope)? Did students understand the difference in measuring heart rate before, during, and after exercise?

Modifications, Support, and Extensions (for those students with IEP)

Reflection- Did the students learn the content outlined in the lesson focus? Why or why not?