VITAL SIGN PROJECT

Objective

Vital signs are important indicators of health states of the body. Vital signs are defined as various determinations that provide information about the basic body conditions of the patient.

•By the end of this lesson every student will be able to define all of the words in this Vital Signs Vocabulary.

•Students will be able to identify the Medical Equipment normally used by HealthCare professionals in assessing a patient's vital signs.

•**Students will be able to demonstrate the proper procedures to take a set of Vital Signs on a partner and accurately demonstrate that skill to the teacher in under 3 minutes.**

Materials

- Stethoscope
- Thermometer
- Blood Pressure Cuff
- Glucometer
- Watch with second hand

Measurable Vital Signs

- Pulse
- Temperature
- Respirations
- Blood Pressure

Two vital signs that may be important but are not considered "Major Vital Signs" are weight and Blood Glucose Level (Blood Sugar Level). We will go over weight and height because you will need to know that for patient intake.

Vital Signs Medical Terminology:

1. **Apical** - Pertaining to the apex or pointed end of the heart
2. **Apical Pulse** - Pulse taken with a stethoscope and near the apex of the heart
3. **Apnea** - Absence of respirations; temporary cessation of respirations
4. **Arrhythmia** -Irregular or abnormal rhythm, usually referring to the heart rhythm
5. **Axilla** - Armpit, the area of the body under the arm
6. **Auscultation** - The act of listening for sounds within the body
7. **Blood Pressure** -Pressure of circulating blood against the walls of the arteries
8. **Bradycardia** - Slow heart rate, usually below 60 beats a minute
9. **Bradypnea** - Slow respiratory rate, usually below 10 respirations a minute

10. **Capillary Refill** - is the rate at which blood refills empty capillaries. It can be measured by holding a hand higher than heart-level (prevents venous reflux), pressing a fingernail until it turns white, and taking note of the time needed for color to return once the nail is released
11. **Cardiac Arrest** - Sudden stopping of heart action
12. **Carotid Pulse** - felt along the long carotid artery on either side of the neck
13. **Clinical Thermometers** - may be used to record temperatures
14. **Constrict** - To get smaller
15. **Cyanosis** - A dusky, bluish discoloration of the skin, lips, and/or nail beds as a result of decreased oxygen and increased carbon dioxide in the bloodstream.
16. **Diastolic Blood Pressure** - The pressure remaining in the arteries during ventricular relaxation
17. **Dilate** - To get larger
18. **Dyspnea** - Difficult or labored breathing
19. **Electronic Thermometers** - This type of thermometer registers the temperature on a viewer in a few seconds.
20. **Fever** - Elevated body temperature, usually above 101 degrees F, rectally
21. **Height** - Is the measurement of the length of the human body, from the bottom of the feet to the top of the head, when standing erect.
22. **Homeostasis** - Is the ideal health state in the human body.
23. **Hypertension** - High blood pressure
24. **Hyperthermia** - Occurs when the body temperature exceeds 104 degrees, measured rectally.
25. **Hypotension** - Low blood pressure
26. **Hypothermia** - A low body temperature, below 95 degrees measured rectally.
27. **Oral temperatures** - Are taken in the mouth. This is usually the most common, convenient, and comfortable method of obtaining a temperature.
28. **Palpation** - Technique used to feel the texture, size, consistency, and location of parts of the body with the hands
29. **Percussion** - Technique of tapping with the fingertips to evaluate size, borders, and consistency of internal structures of the body
30. **Pulse** - Pressure of the blood felt against the wall of an artery as the heart contracts or beats
31. **Pulse deficit** - The difference between the rate of an apical pulse and the rate of a radial pulse
32. **Pulse pressure** - The difference between systolic and diastolic blood pressure

33. **Pupil** - The black center of the eye
34. **Radial Pulse** - The pulse felt at the wrist
35. **Rate** - Number per minute, as with pulse and respiration counts
36. **Reactivity** - In the pupil of the eyes, reacting to light by changing size
37. **Rectal temperatures** - Are taken in the rectum and is the most accurate of all methods
38. **Respiration** - the process of taking in oxygen (02) and expelling carbon dioxide (CO2) from the lungs and respiratory tract.
39. **Rhythm** - Referring to regularity; regular or irregular
40. **Sign** - An indication of a patient's condition that is objective, or can be observed by another person; an indication that can be seen, heard, smelled or felt by the medical practitioner
41. **Sphygmomanometer** - instrument calibrated for measuring blood pressure in millimeters of mercury (mm Hg)
42. **Stethoscope** - Instrument used for listening to internal body sounds
43. **Symptom** - An indication of a patient's condition that cannot be observed by another person but rather is subjective, or felt and reported by the patient
44. **Systolic Blood Pressure** - The pressure created in the arteries by the blood during ventricular contraction
45. **Tachycardia** - Fast, or rapid, heartbeat (usually more than 100 beats per minute in an adult)
46. **Tachypnea** - Respiratory rate above 25 respirations per minute.
47. **Temperature** - The balance between heat lost and heat produced by the body
48. **Thermometer** - Instrument used to measure temperature
49. **Tympanic Thermometers** - are specialized electronic thermometers that record the aural temperature in the ear.
50. **Vital Signs** - Outward signs of what is going on inside the body, including respiration; pulse; skin color, temperature, and condition (plus capillary refill in infants and children); pupils; and blood pressure

Assignment:

1) Write each vital sign word in **Marzano Format**. What is Marzano Format you may ask?
It is using Nonlinguistic Representations.
According to research, knowledge is stored in two forms: linguistic and visual. The more students use both forms in the classroom, the more opportunity they have to achieve. Recently, use of nonlinguistic representation has proven to not only stimulate but also increase brain activity.
Applications:
** Incorporate words and images using symbols to represent relationships.*
** Use physical models and physical movement to represent information.*

So… on a separate piece of paper, write the word, the definition, your level of understanding 1, 2, 3, or 4, and then draw a picture of the word. This assignment will be turned in at the end of class on Tuesday, October 21st..
We will have a quiz for the medical terminology for vitals as well as a vitals practical The last week in October.