

## **Tutorial Set 8 – Some basic Physics and Related Questions -1**

1. Name the 8 planets of our solar system in order of their distance from the sun. (Do not include Pluto in that is considered to be a “dwarf” planet.)
2. Which of the following is the approximate distance of the sun from earth?
  - a. 100,000 miles
  - b. 20 billion miles
  - c. 93 million miles
  - d. 5 million miles
3. Which of the following is the approximate distance of the moon from earth?
  - a. 5,000 miles
  - b. 240,000 miles
  - c. 93 million miles
  - d. 3 billion miles
4. What is the approximate speed of light?
  - a. 8 million miles per second
  - b. 250,000 miles per second
  - c. 186,000 million per second
  - d. 8 billion miles per second
5. What is the approximate speed of sound?
  - a. 767 miles per hour
  - b. 200,000 miles per hour
  - c. 50 million miles per hour
  - d. 200 miles per hour

6. Sound travels through the air or another medium causing a vibration. For humans, sound is defined as the range of vibrations per second that can be heard. Which of the following two ranges of vibrations are used to define sound?
  - a. 5 to 50,000 second
  - b. 20 to 20,000 per second
  - c. 8,000 to 80,000 per second
  - d. 16 to 16,000 per second
7. In art primary colors are often defined as a set of colors that can be mixed to produce all other color. Which of the following are usually considered to be the three primary colors?
  - a. Black, white and red
  - b. red, green and blue
  - c. yellow, violet and black
  - d. red, white and blue
8. There is a key on the piano that is referred to as A440. Where is that key located and to what does 440 refer?
9. A submarine communicates by which of the following methods?
  - a. radar
  - b. sonar
  - c. radio waves
  - d. light
10. What is the approximate circumference of the earth (around the equator)?
  - a. 4,000 miles
  - b. 24,900 miles
  - c. 100,000 miles
  - d. 500,000 miles