Pakistan School
Kingdom of Bahrain

Class 9: Physics
Instruments for time

We are going to start our first lecture today. I hope you all will enjoy and learn

- Rules of the class
- Be on time for your classes.
- Respect all participants of the class.
- Do not create any disturbance.
- Raise hand if you have a question teacher will answer when it is suitable time.
- Pay attention to your teacher.
- Enter into the class with your name and CPR number
- Follow the time table.

Objective

- Students will be able to differentiate between:
- Mechanical Stop Watch
- Digital Stop Watch

STOPWATCH

- Definition:

A stopwatch is used to measure the time interval of an event.

Types of StopWatches

- There are two types of stopwatches;
- mechanical
- digital

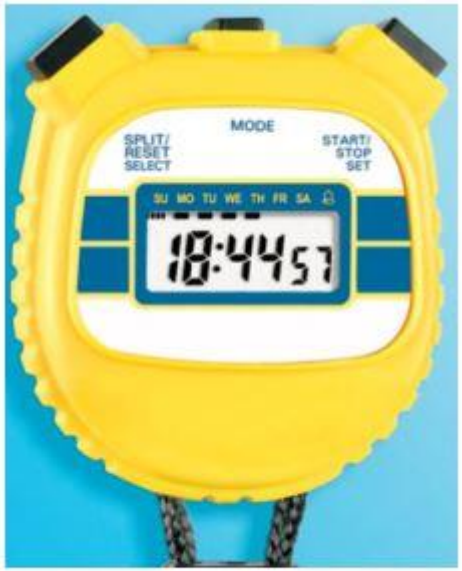

Figure 1.18: A digital stopwatch

Figure 1.17: A mechanical stopwatch

- as shown in figure 1.17 and 1.18.

Explanation

- A mechanical stopwatch can measure a time interval up to a minimum 0.1 second.

Figure 1.17: A mechanical stopwatch

- Digital stopwatches commonly used in laboratories can measure a time interval as small as 1/100 second or 0.01 second.

Figure 1.18: A digital stopwatch

How to use a mechanical stopwatch

- A mechanical stopwatch has a knob that is used to wind the spring that powers the watch.
- It can also be used as a start-stop and reset button.
- The watch starts when the knob is pressed once.
- When pressed second time, it stops the watch while the third press brings the needle back to zero position.

How to use a digital stopwatch

- The digital stopwatch starts to indicate the time lapsed as the start/stop button is pressed.
- As soon as start/stop button is pressed again, it stops and indicates the time interval recorded by it between start and stop of an event.
- A reset button restores its initial zero setting.

Closure: Plenary: Which Stop watch is better and Why?

Figure 1.17: A mechanical stopwatch

Figure 1.18: A digital stopwatch

Home Work

- Attempt any 2 short question from the book
- Or
- Draw a chart of Stop Watch