

Heat and Temperature

1. A thermometry reads the body temperature in Fahrenheit scale gives reading $140^{\circ}F$. What is reading in Celsius scale:

- a. $60^{\circ}C$ b. $75^{\circ}C$ c. $95.6^{\circ}C$ d. $140^{\circ}C$

2. Production and measurement of very high temperature is called:

- a. Pyrometry
b. Cytometry
c. Cryogenics
d. None

3. The temperature of the sun is measured with:

- a. Platinum thermometer
b. Gas thermometer
c. Radiation Pyrometer (Pyro-heliometer)
d. Vapour Pressure Thermometer

- Platinum Resistance thermometer: $-200^{\circ}C$ to $1200^{\circ}C$
 - Gas Thermometer: $-150^{\circ}C$ to $600^{\circ}C$
 - Pyrometer: $800^{\circ}C$ to $6000^{\circ}C$
 - Vapour pressure Thermometer: $0.71k$ to $120K$
- *Ranges may vary as all thermometers have different types.*

4. The absolute zero temperature is:

- a. $-223K$ b. $-273^{\circ}C$ c. $-273.15^{\circ}C$ d. $-273^{\circ}F$

5. The study of physical phenomena at low temperature is:

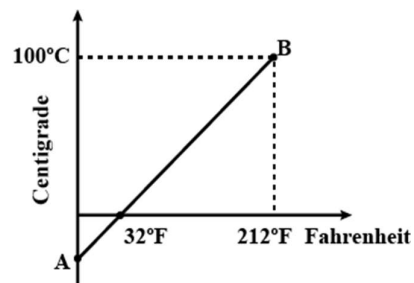
- a. Forzenics b. Cytogenics c. Refrigenics d. Cryogenics

6. Among the temperature scales which scale is more sensitive:

- a. Celsius b. Fahrenheit c. Reaumer d. Kelvin

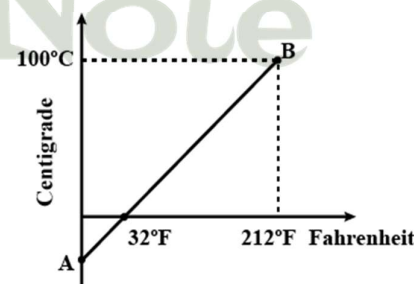
7. The graph AB shown in figure is a plot of temperature of a body in degree Celsius and degree Fahrenheit. Then,

- a. Slope of line AB is $\frac{5}{9}$
b. Slope of line AB is $\frac{9}{5}$
c. Slope of line AB is $\frac{1}{9}$
d. Slope of line AB is $\frac{2}{9}$



8. The graph AB shown in figure is a plot of temperature of a body in degree Celsius and degree Fahrenheit. The value of $\sin \theta$ is:

- a. $\frac{5}{9}$
b. $\frac{9}{5}$
c. $\frac{5}{\sqrt{86}}$
d. $\frac{5}{\sqrt{106}}$



9. A centigrade and a Fahrenheit thermometer are dipped in boiling water. The water temperature is lowered until the Fahrenheit thermometer registers $140^{\circ}F$. What is the fall in temperature registered by a centigrade thermometer?

- a. $30^{\circ}C$ b. $40^{\circ}C$ c. $50^{\circ}C$ d. $60^{\circ}C$

$$\Delta C = \frac{5}{9} \Delta F$$