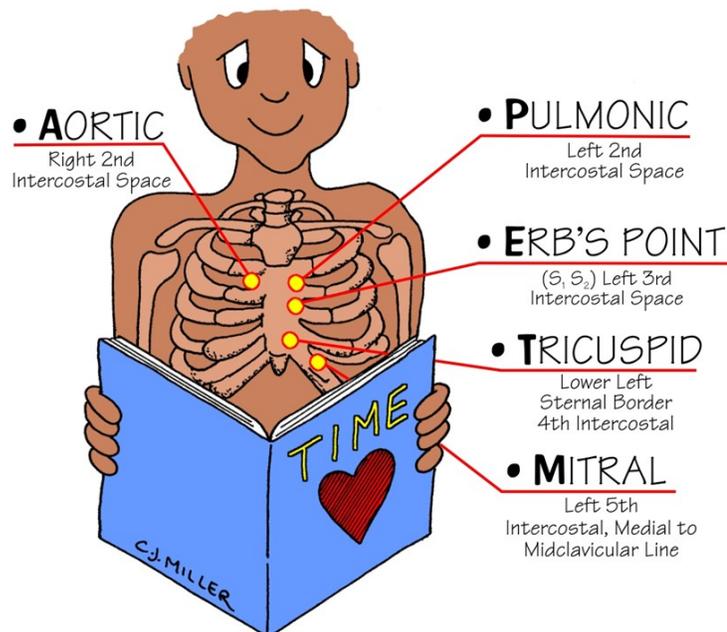


# ♥ Cardiac Assessment Guide ♥

## Auscultating Heart Sounds:

- Preparation & Positioning:
  - Perform hand hygiene, explain the procedure, provide privacy & a quiet environment
  - Avoid auscultating over clothing, as it can distort sounds
  - Ideally place client in sitting position
- Technique:
  - Inspect general appearance, skin color, etc.
  - Instruct client to breathe normally
  - Use diaphragm of stethoscope – S1 & S2
  - Use systematic technique – **All People Enjoy Time Magazine**
    - Aortic – 2<sup>nd</sup> ICS, RSB
    - Pulmonic – 2<sup>nd</sup> ICS, LSB
    - *Erb's Point* – 3<sup>rd</sup> ICS, LSB
    - Tricuspid – 4<sup>th</sup> ICS, LSB
    - Mitral – 5<sup>th</sup> ICS, MCL (PMI\*)

## 5 AREAS FOR LISTENING TO THE HEART



All People Enjoy Time Magazine

### Normal Heart Sounds – S1 & S2 :

- Identify S1 – ‘Lub’
  - Beginning of systole (contraction)
  - Corresponds with the closure of the tricuspid & mitral valves
  - Heard best @ 5<sup>th</sup> ICS MCL – mitral area/apex of heart
  - Count apical pulse here – listen for one full minute
- Identify S2 – ‘Dub’
  - End of diastole (filling)
  - Corresponds with the closure of the pulmonic & aortic valves
  - Heard best @ 2<sup>nd</sup> ICS RSB – aortic area/base of heart

### Abnormal Heart Sounds:

- *Listen for extra sounds in cardiac cycle*
- S3 – Ventricular Gallop
  - Resembles the word ‘ken-tuc-ky’
  - Heard during diastole – S1, S2, S3
  - Can be normal in children & young adults – or may be sign of heart failure, mitral regurgitation, or shunts
  - Low-pitched sound resulting from vibrations caused by rapid ventricular distention & resistance to filling
- S4 – Atrial Gallop

- Resembles the word ‘**Ten**-nes-see’
- Heard late in diastole, right before S1 – S4, S1, S2
- Can indicate HTN, LV hypertrophy, acute MI, or aortic stenosis
- Results from vibrations caused by forceful atrial ejection into enlarged ventricles & resistance to ventricular filling
- Murmurs
  - Occurs when structural defects in the heart’s chambers or valves causes turbulent blood flow
  - Auscultate in same systematic technique
- Pericardial Friction Rub
  - Occurs in pericarditis – sounds scratchy, like rubbing
  - Have clients sit upright, lean forward, & exhale while listening over 3<sup>rd</sup> ICS
  - Can have client hold breath if unable to hear