

12/2/14 Today's Agenda:

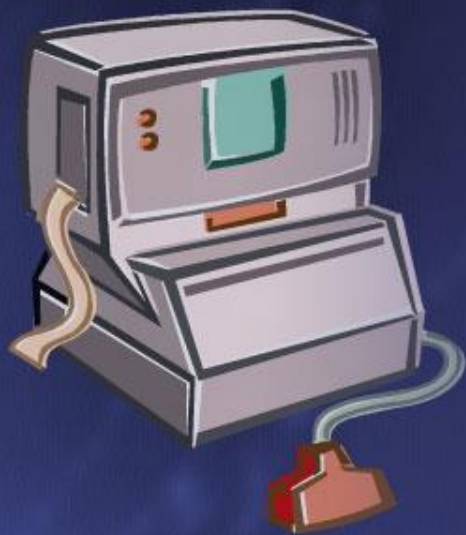
1. Warm-up – students will make simulated blood to understand it's components.
2. **TO:** How do we set up for an EKG?
3. Students will watch video on how to properly set up for an EKG test.



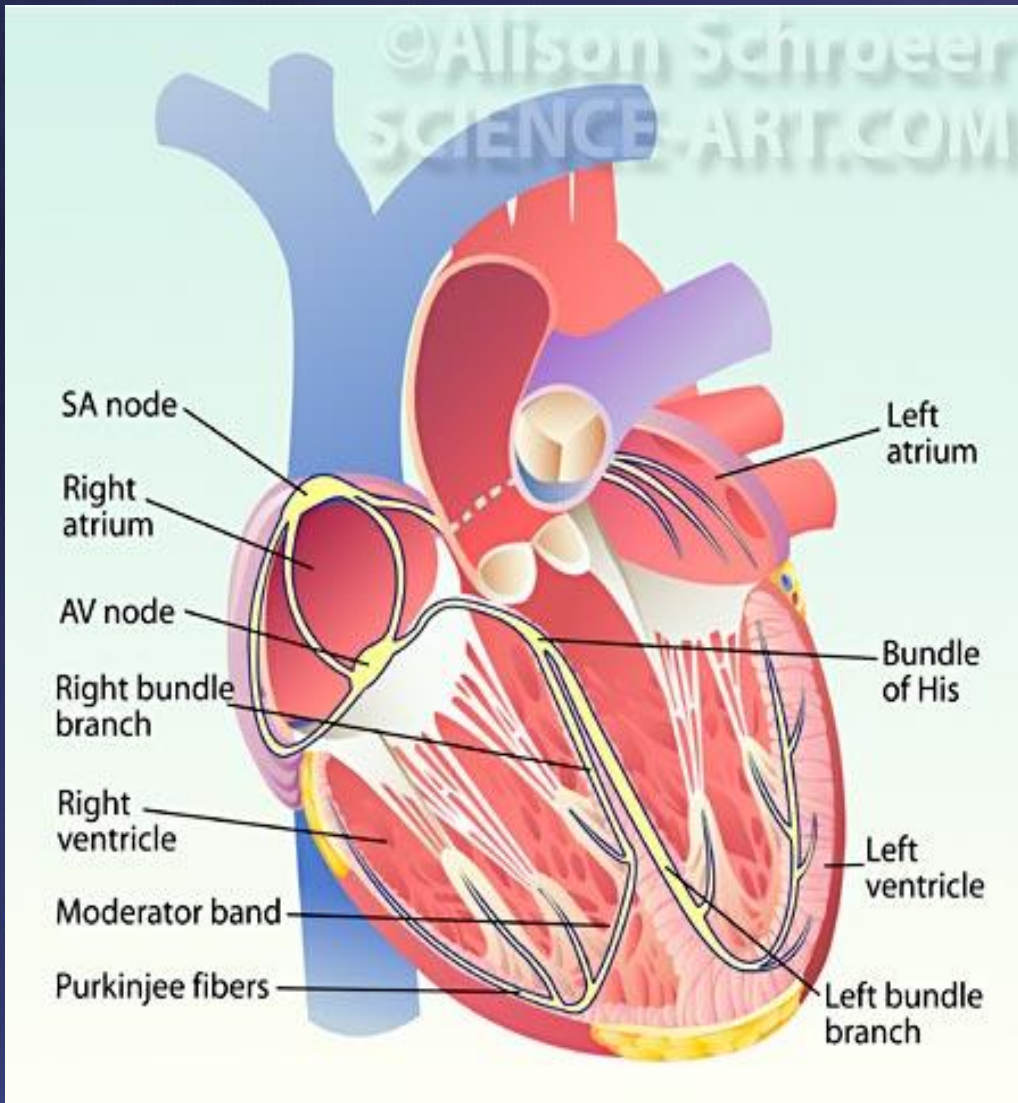
What is an ECG?

Electrocardiogram

- test that checks for dz/damage to heart mm by examining the electrical activity of your heart
- What is the electrical activity of the heart?



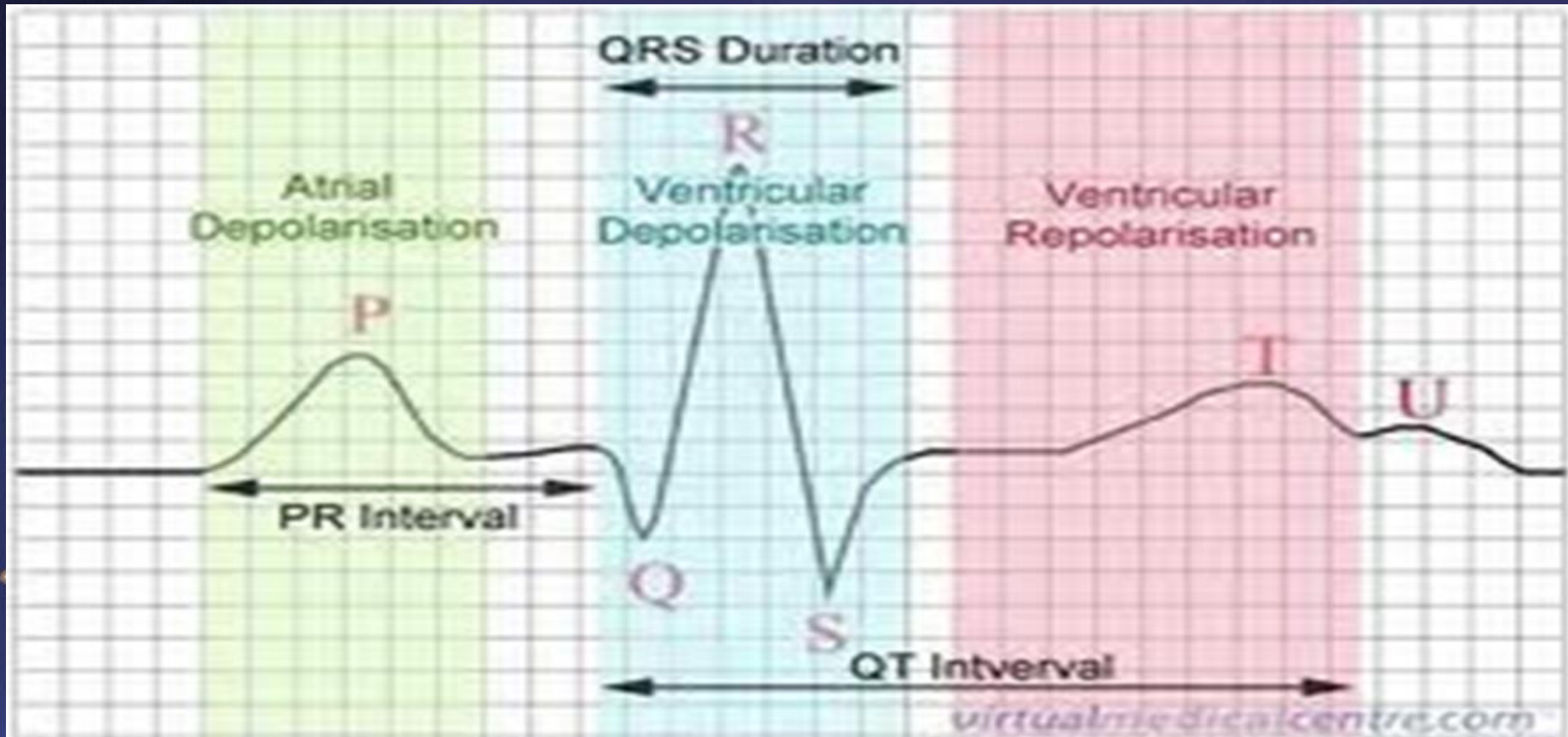
Conduction Pattern



1. SA Node (sinoatrial)
2. thru atria (contract)
3. AV Node (atrioventricular)
4. bundle of His
5. thru R and L bundle branches
6. Purkinje fibers (ventricles contract)

PQRST Complex

- EKG translates the heart's electrical activity into line tracings on paper
- Spikes and dips in the line tracings are called waves
 - Those waves, are the PQRST Complex
 - 1 PQRST complex = 1 hb



What does PQRST complex tell us, 2 things?

1. Polarization Phases

- Atrial Depolarization – contract/systole
- Ventricle Depolarization – contract/systole
- Ventricular Repolarization – relax/diastole



What does PQRST complex tell us, 2 things?

2. Electrical activity

- P - impulse at SA & travels thru atria
- QRS - impulse at AV, bundle of His, bundle branches, and Purkinje fibers
- T - ventricles repolarize (recovery period before next heart beat)



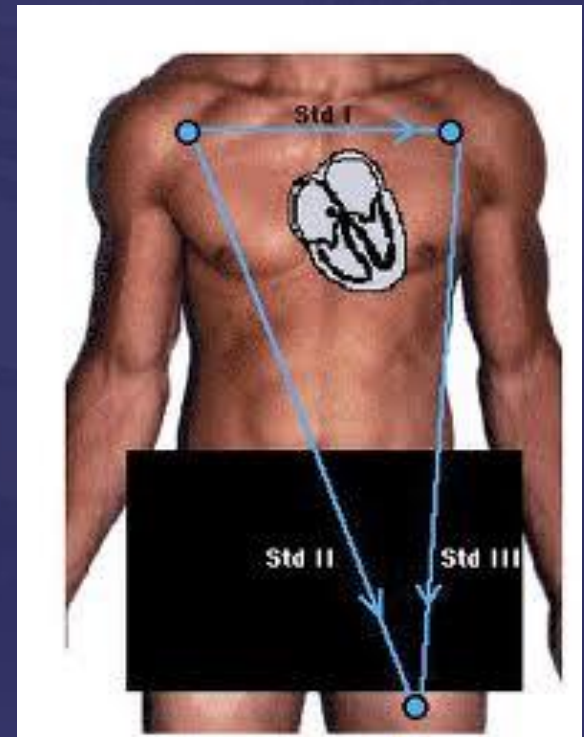
How do we set up for an EKG Test?

- Leads - Allow us to record from different angles of the heart
 - Complete EKG = 12 leads



3 Classification of Leads

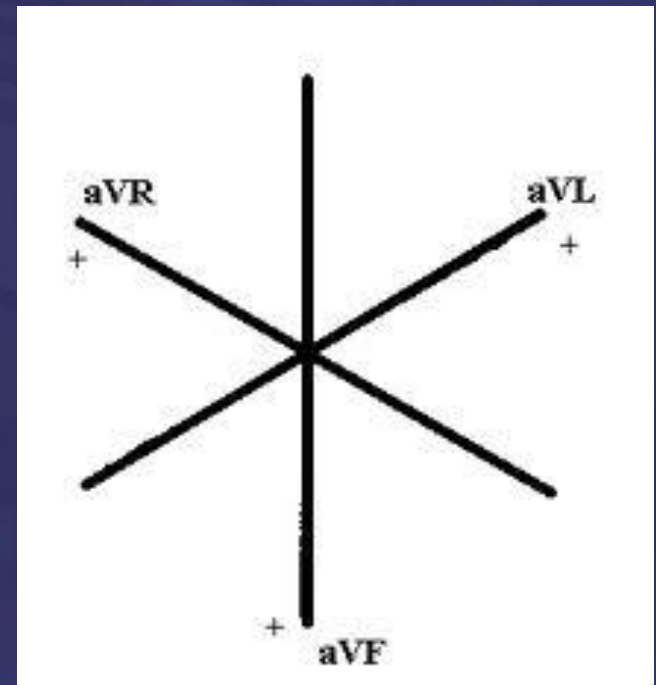
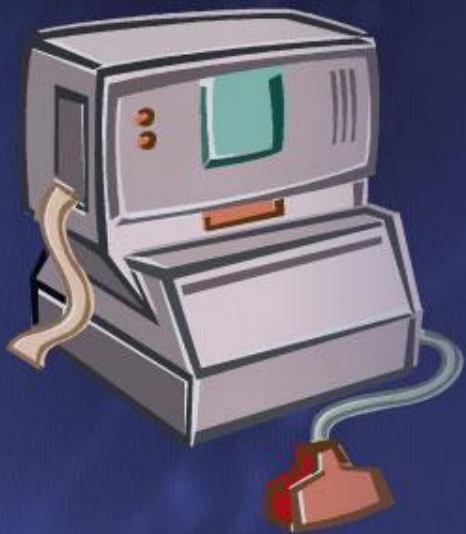
1. Standard (aka limb)
 - A. Lead I – R/L arm
 - B. Lead II – R/L leg
 - C. Lead III – L arm & L leg



3 Classifications of Leads

2. Augmented Voltage Leads

- aVR – R arm
- aVL – L arm
- aVF – L foot



3 Classifications of Leads

3. Chest Leads (precordial)

V1: 4th intercostal space on R side of sternum

V2: 4th intercostal space on L side of sternum

- AKA SINUS RHYTHM LEAD

V3: midway b/w V2 and V4 positions

- IN ER JUST NEED FIRST 3 LEADS

V4: 5th intercostal space from mid-clavicular line

V5: same level as 4 but at L anterior axillary line

V6: same level as 4 but a left midaxillary line

