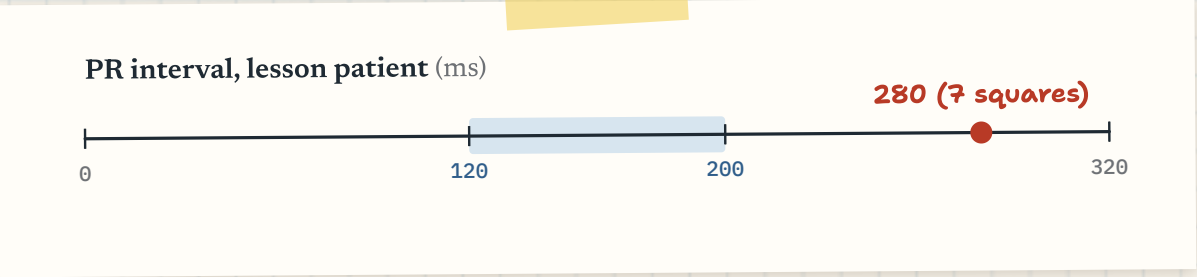
ECG waves and intervals

Match each wave to its electrical event



Step by step

1. PR over 200 ms: delay at the AV node
2. Wide QRS with a normal PR: delay below the AV node
3. ST segment lifts or sags: think ischemia first
4. Long QT: risk of torsades de pointes

Part	Meaning
P wave	Atrial depolarization
PR interval	AV node delay; normal 120–200 ms
QRS complex	Ventricular depolarization; normal about 70–100 ms
ST segment	Between depolarization and repolarization
T wave	Ventricular repolarization
QT interval	Depolarization plus repolarization

Waves and intervals

Rule of thumb

Long PR = slow AV node

Wide QRS + normal PR = delay below the AV node

1 small square = 40 ms (25 mm/s)

Exam traps

- Atrial repolarization is hidden inside the QRS.
- A long PR still conducts every P wave; it is just late.
- QT shortens at fast rates and lengthens at slow ones.

ECG waves and intervals: what P, PR, QRS, ST and QT mean

Video, written lesson, practice question and sources: medservatory.com/usmle-step-1/heart-sounds-murmurs-ecg/ecg-waves-intervals

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