

Name _____
Date _____ Block _____

Hyper-Heart Computer Activity

(http://library.med.utah.edu/kw/pharm/hyper_heart1.html)

--Hit play and watch the heart beat for 30 seconds. Practice stopping the animation using the stop button, and now try reversing and fast forwarding. Read thru the tutorials and answer the following questions.

1. Use the animation (tutorial) and the graph to explain what is happening in the various stages of the heartbeat.

At Atrial Systole-

Which muscles are contracting?

Which muscles are relaxing?

Which valves are open?

Which valves are closed?

At the Rapid Ejection phase-

Which muscles are contracting?

Which muscles are relaxing?

Which valves are open?

Which valves are closed?

2. Explain why the muscle of the left ventricle is thicker than that on the right.

3. What causes the heart sounds?

4. During which stage is the aortic pressure the highest?

5. At the peak of the QRS-wave, what is happening in the heart chambers?

6. When is the volume of the aorta at it's highest? (hint, see green line)

7. When is the volume of the atria at the highest?

8. About how long does the "cardiac cycle" take?

