

TEST #3 – section 1
Dec 8, 2015

1. Where, when and how did chemistry transition into biology on Earth? How did we get to the common ancestor of all life?
2. What are the environmental requirements for life? Discuss those requirements in detail, i.e. what considerations apply for each, and where can we hope to see them fulfilled?
3. What evidence do we have that Mars used to be habitable? What were some of the major geological factors that rendered Mars uninhabitable today?
4. What are the prospects for life on Europa? Make your case by discussing all factors that might make Europa habitable, and explain whether we can hope for complex life to develop there.
5. Global warming is debated in modern-day politics for good reason. What causes global warming (in terms of physics)? List a few scientific lines of evidence that global warming is caused by humans. What are the consequences of global warming if left "untreated"?
6. What happens to the habitability of a celestial body over time that is significantly smaller than Earth? Discuss the main geological factors along the entire timeline, from initial formation to the point of complete cool-down.