## Video worksheet: Cosmos "Some of the Things That Molecules Do" HONORS BIOLOGY: UNIT 8

**Directions:** Answer the questions as you watch episode 2 of Cosmos: A Spacetime Odyssey

- 1. What are two of the things human ancestors used the sky for?
- 2. What caused the wolf to NOT come and get the bone from Neil deGrasse Tyson?
- 3. How many years ago did wolves begin to evolve into dogs?
- 4. How is being "cute" for a dog an evolutionary advantage?
- 5. What kind of selection did the humans use to create dogs (and all the tasty plants we eat)?
- 6. What is the name of the protein that helps move things around a cell?
- 7. What does Neil deGrasse Tyson compare the number of atoms in one molecule of DNA to?
- 8. What is it called when a mistake "sneaks by" the proofreader in a DNA molecule?
- 9. Why does the white bear have an advantage?
- 10. Why are there no longer any brown polar bears?
- 11. What will most likely happen to the white bears if the ice caps keep melting?

12. What is the human's closest living relative?

13. What does the "trunk" of the "tree of life" symbolize?

14. Why do some people believe the human eye is an example of why evolution can't be true?

15. What trait did the first bacteria evolve that started the evolution of an eye?

16. Why was this bacterial trait an advantage?

17. Why can't land animals just start from scratch to evolve a new and better eye?

18. Why is saying evolution is "just a theory" misleading?

19. When did the greatest mass extinction of all time happen?

20. What is the name of the "toughest" animal to ever live that survived all five mass extinction events?

21. What are the lakes on Titan made out of?

22. Where does current scientific evidence think life began on Earth?