

C. elegans Research

Name _____

Period _____

You are a NASA engineer and have been asked to research the history and needs (constraints) of *C. elegans* in space. This information will be used to help you construct a space vehicle that will be used to send *C. elegans* to Mars, orbit it, and then return to Earth (Mission duration is 12 months).

1. What is *C. elegans*' life cycle? What happens to the dead organisms?
2. How do *C. elegans* reproduce? How often?
3. What is the *C. elegans* anatomy like? How do they move? Are there different sexes? What are they?
4. How does space flight affect *C. elegans*' development? How does radiation affect *C. elegans*?
5. What are the feeding requirements of *C. elegans*? (What do they eat, how often?) How do they get rid of waste (go to the bathroom)?

