

MOVIE- HOW GIANT TUBE WORMS SURVIVE NAME _____

<https://www.pbs.org/video/how-giant-tube-worms-survive-at-hydrothermal-vents-cpms1j/>

1. Deep-sea hydrothermal vents are heated by _____.
2. There is _____ sunlight here.
3. The bizarre _____ are giants that can grow over six feet long.
4. Their bodies are encased in white _____ anchored to the rocks.
5. These worms have no mouth, no gut, and no _____.
6. Instead of a gut these worms have an _____ called a trophosome.
7. But this trophosome was different and was packed with crystals of pure _____.
8. Water spewing from the hydrothermal vents had a high concentration of hydrogen sulfide, a potent _____ to most lifeforms.
9. They must have _____ sulfur-oxidizing bacteria inside of their tissues that are feeding the worm."
10. So, Colleen discovered that trillions of bacteria are living in the trophosome, using the hydrogen sulfide from the vents as an energy source... ..in a process called _____.
11. Chemosynthesis is a process using _____ such as hydrogen sulfide as energy sources, but photosynthesis uses _____.
12. The bacteria ingest and process the _____ from the vents.
13. In doing so they excrete sulfur, but they also release energy which they use to make food for themselves and for the _____.
14. Chemosynthesis is making food not with solar power, but with _____ power.
15. Which symbiosis is occurring? (mutualism, commensalism, parasitism?) –*use your memory, not in movie*
16. How do the bacteria get into it in the first place? _____
17. How do the sulfides get in? _____
18. The plume is like a _____.
19. Why is the plume deep red? _____
20. The whole ecosystem is dependent on the _____ in this hot water that's coming up.
21. What is the temperature of the vents? _____

