**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_**



**Student Constructed Response**

**Standard:** I can describe how homeostatic balance occurs in cells and organisms.

**Prompt:** A shipwrecked sailor is stranded on a small desert island with no fresh water to drink. She knows she could last without food for up to a month, but if she didn't have water to drink she would be dead within a week. Hoping to postpone the inevitable, her thirst drove her to drink the salty seawater. She was dead in two days. Why do you think drinking seawater killed the sailor faster than not drinking any water at all?

Using what we have learned so far about osmosis and diffusion, discuss what the salt intake would do to our cells and how that killed the sailor. Please use and underline the following vocabulary in your answer:

**hypertonic cell membrane crenate diffuse**

Response:

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**Student Rating (1-5) \_\_\_\_\_\_\_/5**

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| --- | --- | --- | --- |
| **5** | **4** | **3** | **2** |
| Students demonstrate clear understanding of osmosis and diffusion using four required vocabulary correctly to explain concept.  | Students demonstrate understanding of osmosis and diffusion using three of the required vocabulary correctly to explain concept. | Students demonstrate little understanding of osmosis and diffusion using two required vocabulary correctly to explain concept. | Student demonstrates no understanding of osmosis and diffusion using one of the required vocabulary correctly to explain concept. |