**Homeostasis Practice**

**Brain Pop Video**

1. What is the difference between the external environment and our bodies (the internal environment)?
2. Why must the chemical balance and temperature inside our bodies stay constant?
3. How does feedback work in our bodies?
4. What are the two types of feedback?
5. What are other examples of homeostasis besides temperature control?

**Homeostasis Scenarios**

The following scenarios are all examples of organisms maintaining homeostasis. For each one, describe the initial change, if that change was in the internal or external environment, and the organism’s response.

*A) A wolf pants after chasing a rabbit to kill*

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| --- | --- | --- |
| Initial Change | Internal/External? | Response |
|  |  |  |

*B) A human sweats when it gets really hot outside*

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| --- | --- | --- |
| Initial Change | Internal/External? | Response |
|  |  |  |

*C) A human’s pupils dilate (get bigger) when the room gets dark*

|  |  |  |
| --- | --- | --- |
| Initial Change | Internal/External? | Response |
|  |  |  |

*D) When a pregnant woman starts having contractions, she goes into labor.*

|  |  |  |
| --- | --- | --- |
| Initial Change | Internal/External? | Response |
|  |  |  |

*E) When you stand up, your blood pressure increases to pump for blood to your brain*.

|  |  |  |
| --- | --- | --- |
| Initial Change | Internal/External? | Response |
|  |  |  |

*F) When you do a wall sit, your muscle cells switch to anaerobic respiration.*

|  |  |  |
| --- | --- | --- |
| Initial Change | Internal/External? | Response |
|  |  |  |

*G) When a plant needs to keep more water inside for photosynthesis, it closes its stomata (small openings in the leaves).*

|  |  |  |
| --- | --- | --- |
| Initial Change | Internal/External? | Response |
|  |  |  |

*H) When bacteria are in a salty environment, they may push water out of their cells to make the environment less salty.*

|  |  |  |
| --- | --- | --- |
| Initial Change | Internal/External? | Response |
|  |  |  |

**What happens when homeostasis fails?**

Read the assigned reading at your group and answer the following four questions.

1) What external conditions did this person face?

2) What signs or symptoms did this person’s body show that they were failing to maintain homeostasis?

3) What should this person have done to help his/her body maintain homeostasis?

4) What caused this person’s death?

***Then, present your story to your group and explain your four answers. As your group presents their stories, answer the following questions about their articles.***

**Article #2:** 1) What external conditions did that person face?

2) What signs or symptoms did that person’s body show that they were failing to maintain homeostasis?

**Article #3:** 1) What external conditions did that person face?

2) What signs or symptoms did that person’s body show that they were failing to maintain homeostasis?