**Wanted...for Being Extreme!**

 You are going to develop and apply your knowledge about an extremophile to create a ‘wanted poster‘. You can use your own creativity and inventiveness to give your organism some “personality” and “preferences” but **specific information about the organism’s biology should remain as factual and accurate as possible**. Make your poster a coherent collection of information about your extremophile, rather than a disconnected list of answers to the questions.

**Step One- Observations/Research**

Use resources such as the internet, articles, and books to research your assigned organism.

Be sure to cite your resources. Word process your information and be neat and organized.

 You may trace, redraw, or modify pictures or diagrams to use on your poster. Retain accuracy and detail in your pictures. Below each picture, include a legend that describes the picture (for example: “Here the suspect is attached to a ...).

**Step Two- Questions to Consider**

 On your poster include at least 1 aspect from each of the following components:

Taxonomy

1. **Name and Relations** – Give the suspect’s scientific name. List the suspect’s taxonomy as specifically as possible. State scientific or common names of related organisms.
2. **Aliases, AKA (also known as)** – What are the common names for the organism?

Body Plan

1. **Identifying Features** – Provide a detailed description of the suspect’s appearance, shape size, color, texture, symmetry, segmentation (y/n), skeletal features, etc.
2. **Distinguishing Marks** – What distinguishes the suspect from its relatives? For example, what would allow you to pick the suspect out of a line-up of its relatives. What features are unique, special, or peculiar about the suspect?

Development

1. **Juvenile Record** – Describe the suspect’s earlier appearance(s). That is, life stages and life cycle.

How big will the suspect grow? If there is no difference, describe reproductive strategy of parents.

1. **Police Sketches** – Create drawings to support information about the organism’s life stages and

cycle or how it was produced.

General Ecology

1. **Last Whereabouts** – Describe the suspect’s specific microhabitat. (Such as: under a rock, in shallow water near the shoreline, surrounded by plant material, etc.)
2. **Preferred Hangouts** – Describe the suspect’s biological community. Which populations of organisms live around the suspect? What is the suspect’s niche?
3. **Rap Sheet** – For example, ciliary gliding without a license, carrying a concealed pharynx, construction of a case without a permit.

Locomotion

1. **Suspect Last Seen Heading Towards** – Possible destinations within the suspect’s habitat.
2. **Means of Getaway** – Provide a detailed description of the suspect’s pattern or means of locomotion.
3. **Caution When Apprehending** - What makes the organism dangerous (extreme)? Describe the suspect’s escape and defense mechanisms.

Speculations About the Suspect

1. **Speculations** - If information is not available, you need to apply what you have learned to create a feasible speculative answer. Detail what information is speculative by discussing what you (a) are unsure of, (b) could find no information about, or (c) would like to know more about.

**Step Three – Create a Visual**

 Your poster must include visuals that you create. Your visuals can be hand drawn, traced, or created on the computer. If photocopied or printed out from the web, be sure to include citation. Include a descriptive drawing of your invertebrate. This drawing should be large enough to label any distinguishing features. You may decide to create a ‘profile’ (side view) of the organism.

**Step Four – Create Your Poster**

 The ‘wanted poster’ is a creative outlet for you to show your expertise on your extremophile. Your goal is to produce a unique poster while highlighting accurate biological information. You may draw/write directly on the poster or cut and paste. Example of how to get started (a partially completed) poster for an invertebrate (flatworm):

**Wanted Poster Rubric**

 **Improvement Excellent Acceptable Needs**

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| --- | --- | --- | --- |
| **Content**(scientific information)\_\_\_\_\_pts. out of 50 | All of the required biological information is presented on the poster.All of the information is accurate.  | Most of the required biological information is presented on the poster.Some of the accuracy may be sacrificed to embellish the poster.  | Little of the required biological information is presented on the poster. Some of the information is inaccurate. |
| **Quality of Ideas**\_\_\_\_\_pts. out of 20 | The ideas on the poster are rich in thought and imagination, relevant to the story line and clearly presented. | The ideas on the poster are sound but unimaginative; most ideas are relevant to the story line. | The ideas on the poster are unimaginative, not relevant to the story line, undeveloped or incomplete. |
| **Organization**\_\_\_\_\_pts. out of 10 | The work is well organized and complete. | The poster is organized but does not flow well or shows no connection between facts. | The poster is not organized well. It may be hard to follow. |
| **Illustration**\_\_\_\_\_pts. out of 20 | The illustration is exceptional. It is accurate, neat and labeled. | The illustration is recognizable. It is labeled accurately. | The illustration is of poor quality or is not labeled. |
|  **TOTAL****\_\_\_\_\_\_\_\_pts. out of 100** |  |  |  |