

The purpose of the report is to provide you with background information about the animal you will use in your term project. When researching in science, we always want to know what is already known about our research subject before we ask questions. Write about one of the three animals in the Activity Guide: shore crab, copepod or brine shrimp.

The report must include the following:

- Common and scientific names
- Morphological description
- Natural habitat and range
- Abiotic factors affecting its growth, survival, reproduction and behaviour
- Biotic factors, including interactions with other organisms in its habitat
- 500 words – 2 pages typewritten and double-spaced.

A good format:

- Your name and date
- Title (make this a good descriptive title)
- Introductory paragraph ending with the topics in your report (3-5 usually).
- A paragraph for each topic, starting with a topic sentence.
- A concluding paragraph, relating your animal to a larger picture or idea, ecological relevance for example.
- Use transition words and sentences for easy and logical reading.

Sources:

- Books other than textbooks (e-books are fine)
- Three peer-reviewed science journal articles
- Reputable web sites, such as education sites (it's good to start with these, because they may have cited some good articles).

Where to find science journal articles:

- VCC library: library.vcc.ca
 - Articles and resources by subject: choose Sciences
 - Use the databases: ScienceDirect or Academic Search complete
 - Search with words like *Hemigrapsus oregonensis* OR *h oregonensis*
 - Use articles that have full text (pdf) available.
- These articles will be very complex, but their introductions are likely to have some good general information about the animal. You only need to use one or two pieces of information from each of the three articles.

Citations:

- Use Harvard style (guide: <https://sciencerocks.ca/writing-a-scientific-paper/>)

Example of introductory paragraph (all facts and authors are made up).

The watacanatwopips (*Arrividerci tropicana*) is a crustacean in the Jujub family, fossils of which were found in the Burgess Shale dating back to the cretaceous (Maxwell, 2009). It is a massively important secondary consumer in aquatic food chains, being prey for predators as small as zooplankton, and large as the blue whale. Maxwell (2009) may have a few more interesting things known about the animal, which you could write here. In this report, I investigate the habitat and range of *A. Tropicana*, its ecological and economical importance, and measures required for conservation of this small but not insignificant invertebrate.

- Note in this introductory sentence the format for scientific names, citation style, and five topics to be covered in the report in the last sentence.

Example of the beginning of this fictional report:

The habitat of *A. tropicana* is incredibly diverse. It has been found in such diverse locations as the eleven kilometre depth of the Mariana's trench, to the dizzying heights of lake Titicaca, almost four kilometres in elevation (Chilipepper et al, 2009). Although these habitats diverge in elevation, on a local scale the animal feeds and reproduces in very specific conditions. For example, as a sit-and-wait predator, it uses an object such as a large rock to hide behind and wait for unsuspecting prey to swim by (Beaker and Kermit 2010). In addition, you will add more about habitat. The habitat of this peculiar animal is diverse, which is reflected in its range.

The range of *A. tropicana* encircles the Eurasian and North American continents (Foundation of Invertebrate Conservation 2014). ...

- Note the first sentence of any paragraph should be a topic sentence, and the rest of the paragraph includes only that topic. Also note transition words between one sentence and the next and to the next paragraph.

References

Beaker, M. and Kermit, P., 2010. The science of muppets. *Canadian Journal of Puppets*, [e-journal] 55, pp. 50-60. Available through: VCC library website <library.vcc.ca> [Accessed 23 October 2020]

Chilipepper, A., Jalapeño, B., Habenaro, C. 2020. *The weirdest distribution of an animal*. [e-book] Wallington: ABC Publishers. Available at: Google Books< <http://booksgoogle.com>> [accessed 22 October 2020]

Foundation for Invertebrate Conservation. 2014. Invertebrates *of the Atlantic Ocean*. [online] Available at: < <http://www.invertebrates.org/publications/detail/atlantic>> [Accessed 14 July 2020]

Maxwell, S. 1982. *Jujubs of the world*. Vancouver: Publisher.

Suggestions for getting started

- Read about the animal in the Activity Guide.
- Find a good website for general information – an education site would be good, or a conservation site. Here are some I found recently –
 - https://inverts.wallawalla.edu/Arthropoda/Crustacea/Malacostraca/Eumalacostraca/Eucarida/Decapoda/Brachyura/Family_Grapsidae/Hemigrapsus_oregonensis.html. This is from Walla Walla university in Washington.
 - <https://open.library.ubc.ca/cIRcle/collections/ubctheses/831/items/1.0053324> - *T. californicus* thesis by one of my teaching assistants at UBC: James Powlik. This is an open collections site at the UBC library. It's a long thesis, but chock full of Tigriopus facts.
 - <https://www.sciencedirect.com/topics/earth-and-planetary-sciences/artemia>. This is an extremely detailed description of Artemia species in general. This one is a more colourful article: <http://www.bbc.com/earth/story/20151217-the-tiny-creatures-that-flew-to-the-moon-twice-and-survived>

Using advanced search in google (under settings) allows you to choose domains. If you choose .edu, you get lots of grad student theses, which can be very useful, and can be used as a peer-review article.

- Write an outline for your paper. What will be the topic of each paragraph?
- When you decide on your topics, fill in what you need from sources.
- Write everything in your own words – paraphrase – and make sure to cite each source.
- You can write more to start with, and then edit out the superfluous or repetitive points to whittle it down to 500 words.
- Write concisely.
- Even a factual paper can include colourful and expressive writing, as long as it doesn't detract from your points.