

The Downtown Denver Aquarium is a fantastic way for our students at Lone Star School in Northeastern Colorado to study marine life. They have a mission to educate their visitors on how to respect the world around humanity. They partner with several organizations with the goal of preserving natural resources. I suggest we take our middle school students to study marine invertebrates along with the in-house scientists of the aquarium. After the visit, the each student will show what was learned by writing a short book on a marine invertebrate of his or her choice.



Topic of Focus: Marine Invertebrates

Grade Level: 6-8

NGSS Standards Addressed:

- MS-LS2-1 Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- MS-LS2-2 Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
- MS-LS2-3 Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

Time Needed:

1 Lab Day

7 Class Days

Objective:

The objective of this lesson is to create an illustrated children's book on a subject the student has researched on a marine invertebrate of his or her choosing.

Directions:

After our visit to the Downtown Aquarium, we learned a lot about marine invertebrates. You are going to create an illustrated children's book about a marine invertebrate of your choosing. You must include the following information along with illustrations

- Explain the taxonomy of the animal (kingdom, phylum, class, order, family, genus, species)
- The marine ecosystem they live in
- Explain its body components and how it helps the animal survive and be successful in its environment.
- What it eats
- What eats it
- How it contributes to its ecosystem
- Any problems it may be facing due to human impact.

Creating a Children’s Book About Marine Invertebrates

Student Name: _____

CATEGORY	8	6	4	2
Spelling and Grammar	Children's book has no misspellings or grammatical errors.	Children's book has 1-2 misspellings but no grammatical errors.	Children's book has 1-2 grammatical errors but no misspellings.	Children's book has more than 2 grammatical and/or spelling errors.
Content-Accuracy	All content throughout the children's book is accurate. There are no factual errors.	Most of the content is accurate but there is one piece of information that might be inaccurate.	The content is generally accurate, but one piece of information is clearly flawed or inaccurate.	Content is typically confusing or contains more than one factual error.
Content-Inclusion	All content listed in the project description is included.	Most (99-90%) of the content in the project description is included.	Many (89-75%) of the content items in the project description are included.	Fewer than 75% of the content items in the project description are included.

Presentation/ Content knowledge	Student is confident in presenting does not read off the book at all and shows an excellent understanding of their animal.	Student needs to read some information off the book, but overall shows a good understanding of their topic.	Student is lacking confidence in presentation but still has a good understanding of their topic	Student shows no understanding of their topic, as evidence by their inability to answer questions or was reading off their book the entire time.
Originality	Children's book shows considerable originality and inventiveness. The content and ideas are presented in a unique and interesting way.	Children's book shows some originality and inventiveness. The content and ideas are presented in an interesting way.	Children's book shows an attempt at originality and inventiveness on 1-2 cards.	Children's book is a rehash of other people's ideas and/or graphics and shows very little attempt at original thought.
Organization	The story is very well organized. One idea or scene follows another in a logical sequence with clear transitions.	The story is pretty well organized. One idea or scene may seem out of place. Clear transitions are used.	The story is a little hard to follow. The transitions are sometimes not clear.	Ideas and scenes seem to be randomly arranged.
Use of illustrations/clip-art/drawings	Illustrations are detailed, attractive, creative and relate to the text on the page.	Illustrations are somewhat detailed, attractive, and relate to the text on the page.	Illustrations relate to the text on the page.	Illustrations are not present.