Marine and Aquaculture Technology
Year 9
Aquarium Design and Maintenance Assessment

Name:

#

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#

# Introduction to Fish Tank

## Group Members

|  |  |
| --- | --- |
| **Member** | **Name** |
| 1 |  |
| 2 |  |
| 3 |  |
|  |  |

## Names of the animals in the tank

|  |  |  |  |
| --- | --- | --- | --- |
| **Fish/Lifeform** | **Common Name** | **Scientific Name** | **Nickname** |
| 1 |  |  |  |
| 2 |  |  |  |

## Definitions

|  |  |
| --- | --- |
| **Word** | **Definition** |
| Aquarium |  |

## Functional description of aquarium

*In this section you should have:*

1. *A labelled diagram of your fish tank (could be a photo or a sketch).*
2. *The following table.*
	1. *In the “item” column, you should list all of the things that you placed in your tank.*
	2. *In the “functional” column, you should write a description of what the item does and why it is in your tank.*

|  |  |
| --- | --- |
| **Item** | **Function** |
| Filter |  |
|  |  |

## Fish and their conditions

*In this section you should have:*

1. *Pictures (photos) of the fish in your tank. You might choose to have pictures of the fish found online as well.*
2. *The following table.*
	1. *In the “fish” column, you should name your fish.*
	2. *In the “ideal conditions” column, you should list all of the things that are required for your fish to thrive (e.g. temperature, pH level, ammonia level etc etc)*

|  |  |  |
| --- | --- | --- |
| **Fish** | **Photo** | **Ideal Conditions** |
|  |  |  |
|  |  |  |

# Management Plans

## Normal Management Plan

*In this section you will:*

1. *Complete the first table below:*
	1. *In the “task” column, write a list of the tasks that you need to perform to maintain your fish tank. E.g. feeding, cleaning, testing etc.*
	2. *In the “method” column, write down how you perform these tasks.*
	3. *In the “frequency” column, write down how often you need to perform these tasks.*
2. *Write an plan of when you intend to do these tasks for over a two week period. Try to align it with your timetable or when you know the teacher(s) will be available to let you into the classroom.*

|  |  |  |
| --- | --- | --- |
| **Task** | **Method** | **Frequency** |
| E.g. Feed fish | E.g. Take a pinch of fish food from the yellow container.Sprinkle it over the tank.If there is food remaining after 2 minutes remove it from the surface. | E.g. Once every 2 days. Preferably in the morning |
|  |  |  |
|  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| **A** | 8:30am Ask teacher to open doors and feed fish. |  |  |  |  |
| **B** |  |  |  |  |  |

## Holidays Management Plan

In this section you should outline the \*minimum\* that will need to be done to keep your fish alive over a 2 week period.

E.g. how often must they be fed? Is once a week to little?

How often do we need to test the tank? Which tests (if any)? Why?

How often do we need to clean the tank? Is it needed? Why?

Remember, whatever you write here is what the teacher will do over the holidays. If you write the wrong thing, or you are not clear enough, your fish will die.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Week** | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
| **1** |  |  |  |  |  |  |  |
| **2** |  |  |  |  |  |  |  |

#

# Journal

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date:Pictures:*Photos*Observational Update:*(written descriptions of your fish and aquarium ecosystem)*Tests and Results:

|  |  |
| --- | --- |
| **Test** | **Result** |
|  |  |
|  |  |

Evaluation:*(Based on your observations and tests, is there anything that you are going to change in your management plan?)* |
| Date:Pictures:*Photos*Observational Update:*(written descriptions of your fish and aquarium ecosystem)*Tests and Results:

|  |  |
| --- | --- |
| **Test** | **Result** |
|  |  |
|  |  |

Evaluation:*(Based on your observations and tests, is there anything that you are going to change in your management plan?)* |
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| --- | --- |
| **Test** | **Result** |
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|  |  |

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|  |  |

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|  |  |
| --- | --- |
| **Test** | **Result** |
|  |  |
|  |  |

Evaluation:*(Based on your observations and tests, is there anything that you are going to change in your management plan?)* |

# Testing Tables and Graphs

1. *Insert a table of data that summarises all of the tests that you have done.*
2. *Insert a graph showing the change in pH over time.*
3. *Insert a graph showing the change in nitrate levels over time.*
4. *Insert any other graphs that you think are required.*

# Evaluation

Write a critical evaluation of your aquarium.

Try a [SOWC analysis](https://drive.google.com/file/d/1oCpwlj8wpH8h8eyTFNRkpNn2F86s0A90/view).

# References

Correct referencing for any secondary resources.