

The Dark Secret Of The Starfish



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Introduction

We have been working with starfish, and done some experiments. We have chosen to see if the starfish that lives in deepwater prefer the dark or the light area. The species of starfish that we used was *Asteria Rubens*.



Some Facts About Starfish

- The Latin name of starfish is Asteroidea.
- There are about two thousand species in the sea.
- They usually have five arms, but they can have up to twenty arms.
- In the end of the arms they have an eye.
- The biggest species can be up to one meter in diameter.



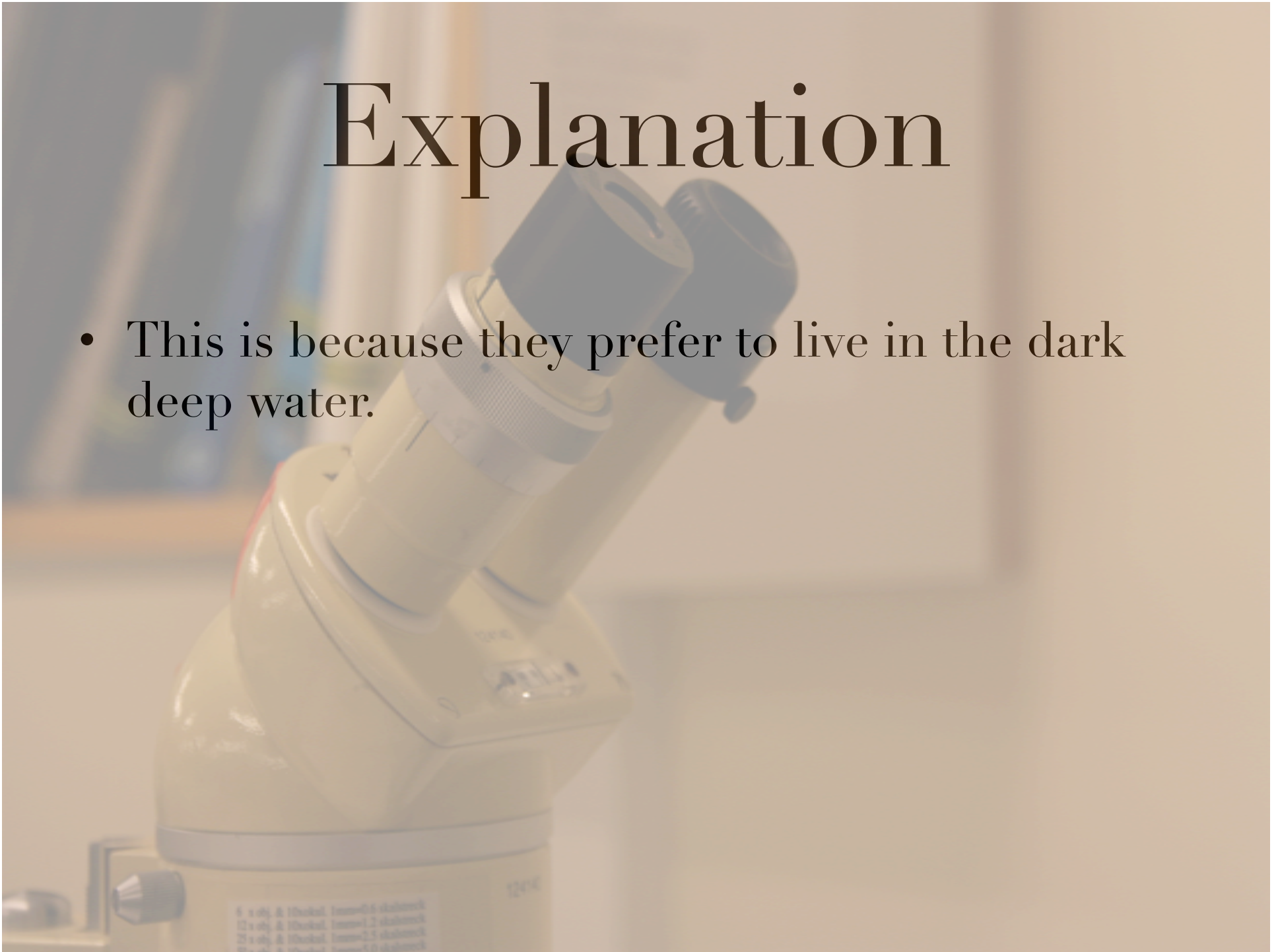
Observation



We saw the starfish that lives in the deepwater where it's dark.

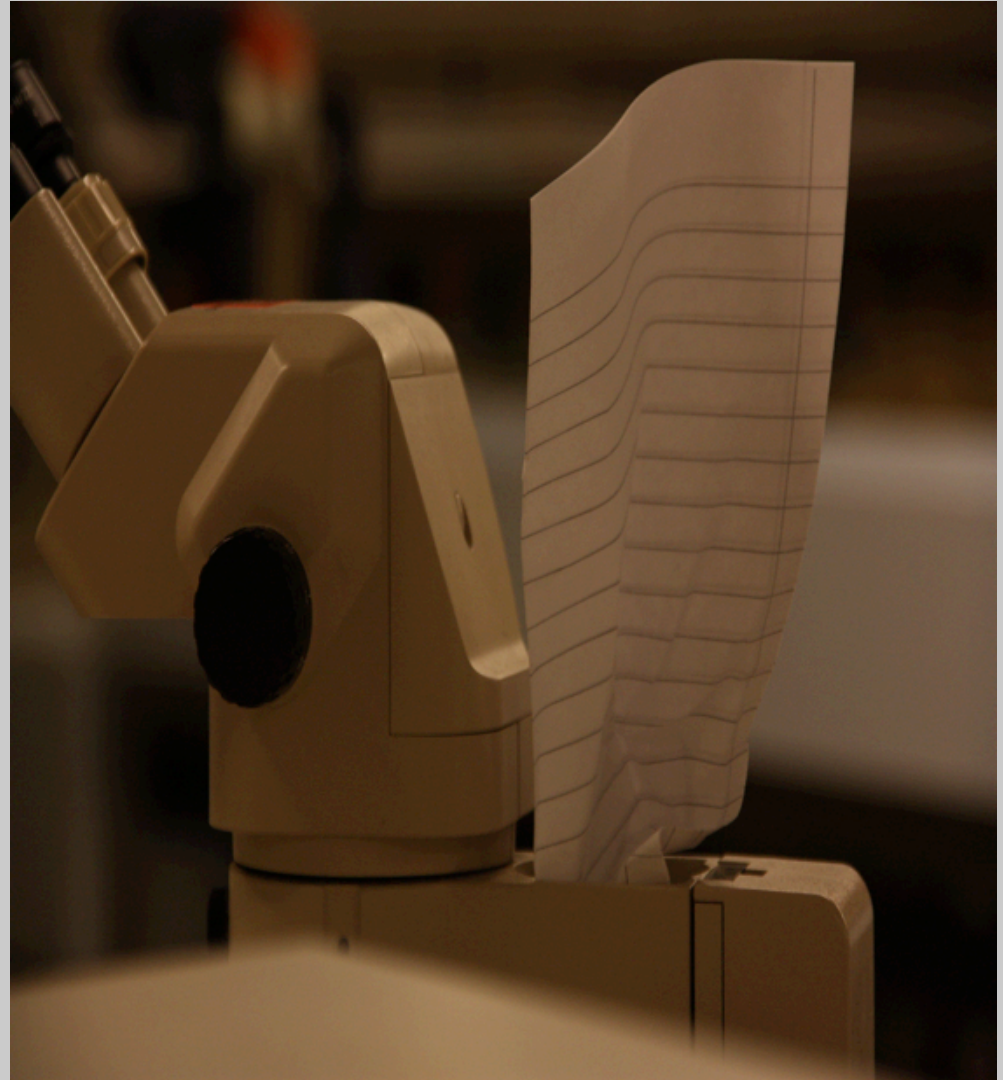
Explanation

- This is because they prefer to live in the dark deep water.



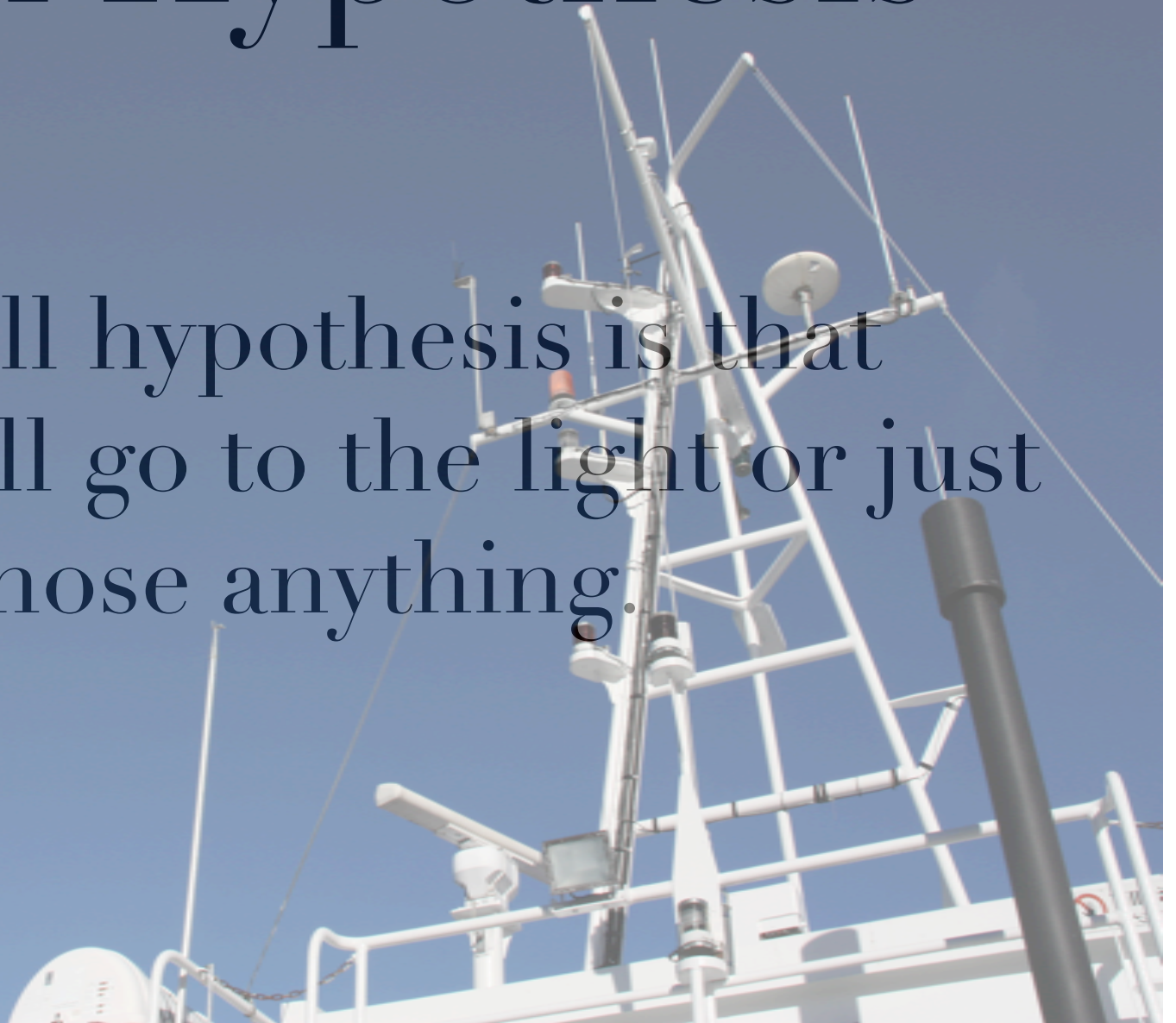
Hypothesis

- Our guess was that the starfish would go to the dark area, because they are used to living in the deep water, where it's dark.



Null Hypothesis

- The null hypothesis is that they will go to the light or just don't chose anything.



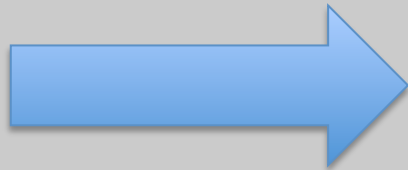
The Materials

To the experiment we used:

- Three plastic buckets
- Garbage bag
- Saltwater
- Light
- Starfish (*Asteria rubens*)

Method

1. We covered half of each of the three buckets with a black garbage bag, and then filled up each bucket with water, until it reached 7 cm. We set up the light so that it faces the opposite side of the covered area.
2. Then we put one starfish in each bucket and left them there for 2h40, checking them around every half an hour, and recorded the data.
3. We repeated the experiment with three of the larger deepwater starfish that came from the basement, where they had been in the dark.



Here you can see how we set up the experiment.



Conclusion

- There was no clear preference.
- They spent time in all of the three places (light, dark & middle).
- They would move throughout the experiment.
- They were always at different parts.

Evaluation

- Starfish were out of their natural environment, therefore they might not have been acting as they normally would.
- The buckets were not covered by exactly the same amount of garbage bags, but it was roughly accurate.
- The movement and noises in the lab could have affected their choice of where to go.

Discussion

- We think that they are in the deepwater because they can't hunt in the shallow water where it's light.

Thanks For Watching!

