



Hi! Thank you for visiting thehomeschooldaily.com ! So glad you were able to find a school tool you can use. Please feel free to use this activity for your own personal use or if you are the main teacher in a coop setting. I provide this free resource to encourage others to homeschool their own.

If you would like to share the file with others, I ask that you share by sending them a link to my website or to the page that hosts the file. Please do not send them a link directly to just the PDF file (the file you are at now).

You may not sell, copy, or alter my files as your own. You may not host my files on your own website without linking them to thehomeschooldaily.com or giving proper attribution to thehomeschooldaily.com .

May you be blessed on your homeschooling journey.

♥ Marie

The Incredible World of the Microscope Video Notes

This is a classic video when studying the microscope. It gives students a great introduction into what a microscope is, how it came to be, and why it is important in the study of science. The video can be accessed through YouTube for free. Just type in the title of the video, "The Incredible World of the Microscope." There is an answer sheet attached. I would encourage the student to read through the questions prior to listening for the answers. Sometimes the art of listening and learning to glean specific information is more important than the information itself. Your student may not have access to a microscope; however, they can become acclimated to the idea of how to use it and why it is important. I would suggest these notes and video to be used with middle school or high school students. Happy learning!

Incredible World of the Microscope Video Notes

Watch the video, "Incredible World of the Microscope," to answer the video note questions below. You can look it up on YouTube.

1.) Why does the book appear larger when placed behind a bowl of water?

2.) What is a curved piece of glass called? _____

3.) What happens when you put two magnifying glasses together? _____

4.) Most student microscopes are called what? _____

5.) If you combine a 10x eyepiece with a 40x objective, the power of the magnification is _____.

6.) Specimens are prepared by scientists for study. They are very thin so that _____ will pass through them.

7.) How should you handle specimens? _____

8.) Why is it tricky to center a specimen? _____

9.) A microscope should only be carried by what part? _____

10.) What are organisms consisting of a single cell called? _____

11.) Single celled organisms can move by using their _____, which are called false feet.

12.) _____ are hair-like strains that single celled organisms use to move.

13.) What is the basic unit of living things? _____

14.) What can be found on the surface of your teeth? _____

15.) When were the first microscopes developed? _____

16.) What did Leeuwenhoek observe with his microscope? _____

17.) What did Pasteur prove? _____

18.) What microscope uses electrons instead of light to magnify objects?

19.) What is the difference between the power of the light and electron microscope? _____

20.) What are smaller than bacteria and cannot be seen with a light microscope?

Incredible World of the Microscope Video Notes - Answer Sheet

Watch the video, "Incredible World of the Microscope," to answer the video note questions below.

1.) Why does the book appear larger when placed behind a bowl of water?

The book appears larger due to the curved surface of the globe.

2.) What is a curved piece of glass called? lens

3.) What happens when you put two magnifying glasses together?

It will increase the overall magnification.

4.) Most student microscopes are called what? stereomicroscope

5.) If you combine a 10x eyepiece with a 40x objective, the power of the magnification is 400.

6.) Specimens are prepared by scientists for study. They are very thin so that light will pass through them.

7.) How should you handle specimens? carefully

8.) Why is it tricky to center a specimen? Because it appears to move in the opposite direction you actually move it

9.) A microscope should only be carried by what part? Arm and base

10.) What are organisms consisting of a single cell called? protozoa

11.) Single celled organisms can move by using their pseudopods, which are called false feet.

12.) Cilia are hair-like strands that single celled organisms use to move.

13.) What is the basic unit of living things? cells

14.) What can be found on the surface of your teeth? bacteria

15.) When were the first microscopes developed? 1500 to 1600's

- 16.) What did Leeuwenhoek observe with his microscope? **Insects, protozoa, bacteria (little animals)**
- 17.) What did Pasteur prove? **He proved that bacteria is connected to diseases**
- 18.) What microscope uses electrons instead of light to magnify objects? **Electron microscope**
- 19.) What is the difference between the power of the light and electron microscope? **The electron microscope can magnify about 100x more than a light microscope allowing us to see more detail.**
- 20.) What are smaller than bacteria and cannot be seen with a light microscope? **viruses**