

Student Name: _____

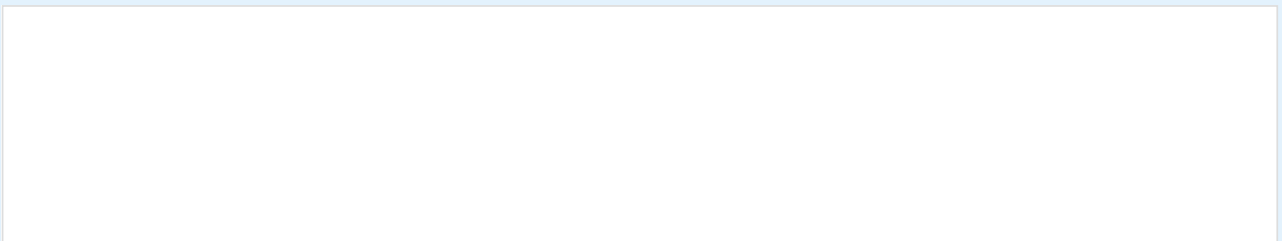
Class: _____

Due Date: _____

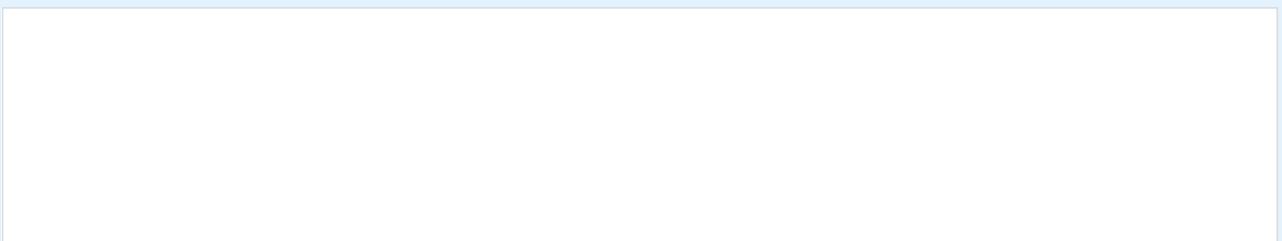
Introduction

Welcome to the world of microscopes and magnifying lenses! In this worksheet, you will learn about the basics of microscopes and magnifying lenses, how to use them, and their applications in science and everyday life.

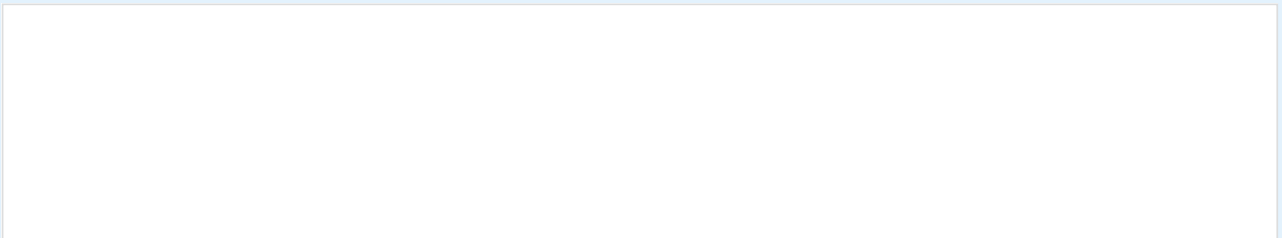
Foundation: What is a microscope? Draw a picture of a microscope and label its parts.



Core: What is the difference between a microscope and a magnifying lens? Write a short paragraph explaining the difference.

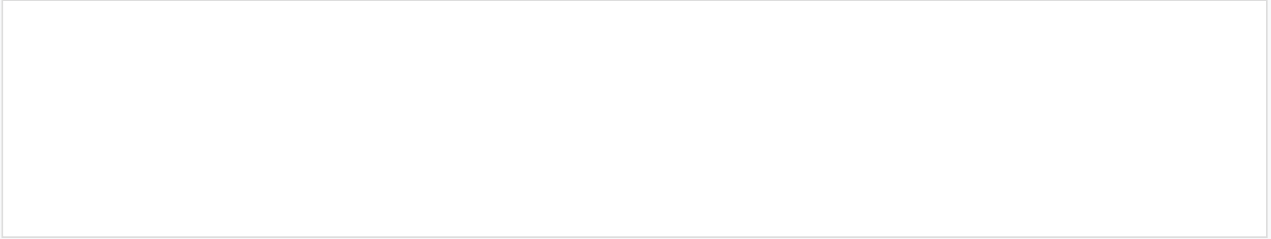


Extension: Research and write about the history of microscopes and magnifying lenses.

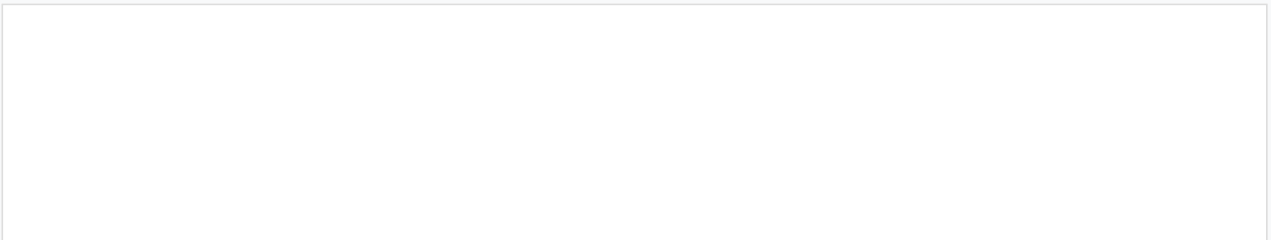


How Microscopes Work

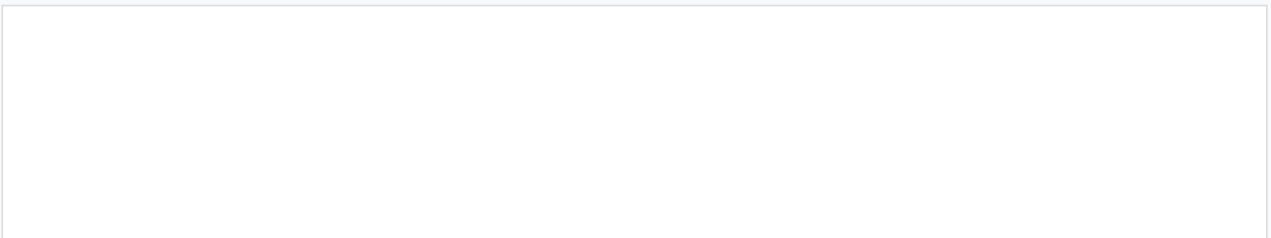
Label the parts of a microscope



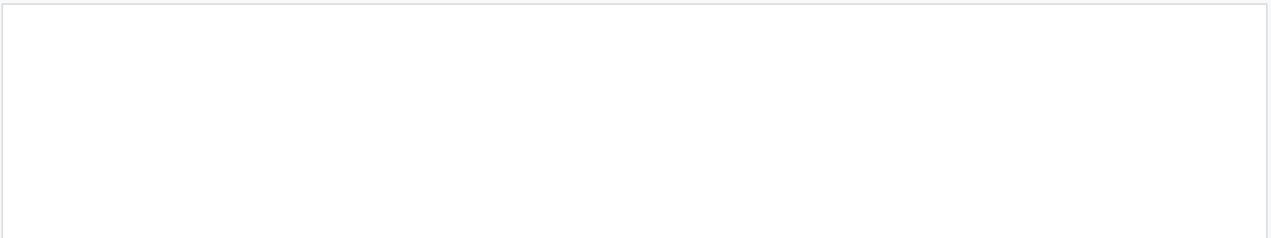
Foundation: Match the parts of a microscope to their functions



Core: Describe how a microscope works, including the role of the objective lens and eyepiece



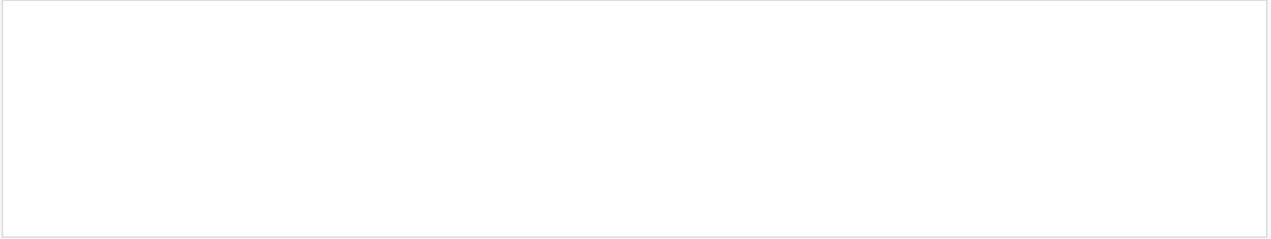
Extension: Explain the concept of magnification and how it is used in microscopes



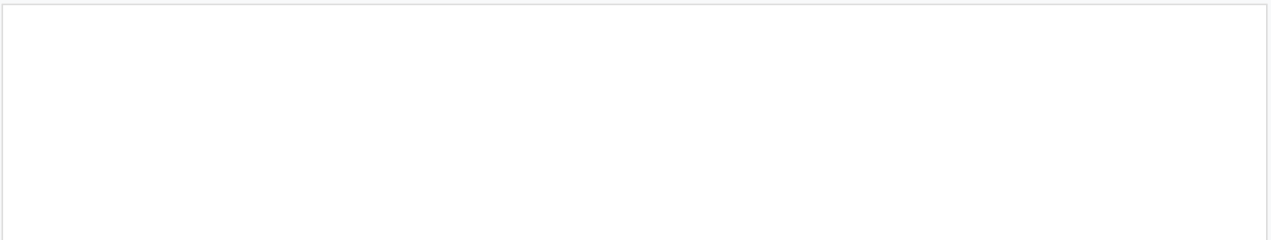
Magnifying Lenses

Magnifying Lenses

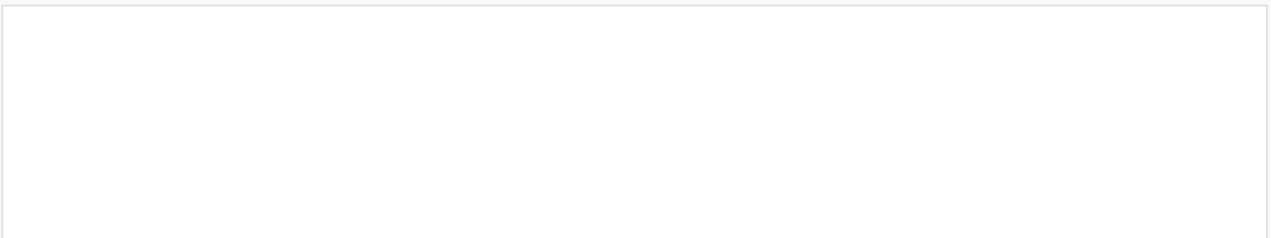
Label the parts of a magnifying lens



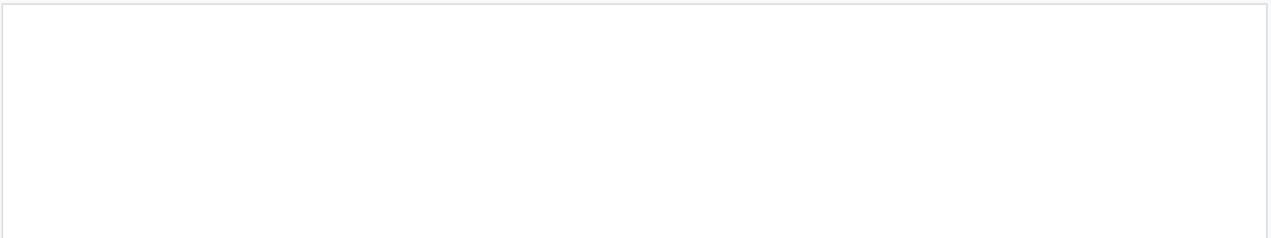
Foundation: What is a magnifying lens? Draw a picture of a magnifying lens and label its parts.



Core: How does a magnifying lens work? Write a short paragraph explaining the principle of magnification.



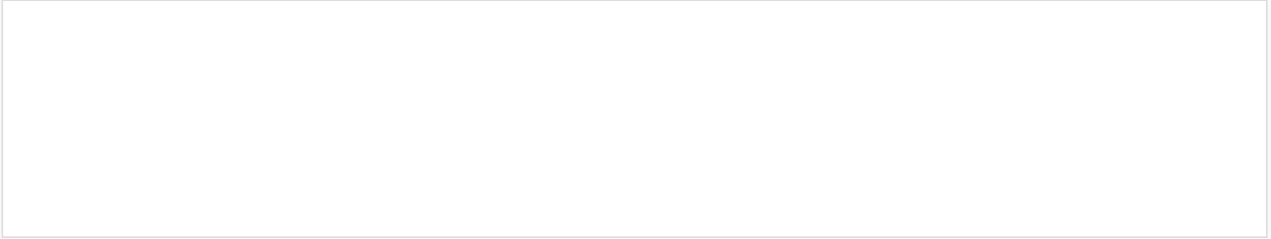
Extension: Research and write about the different types of magnifying lenses and their applications.



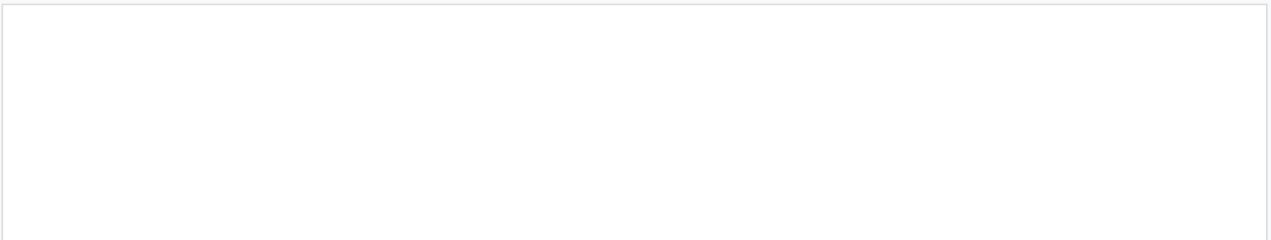
Practical Activity

Observing with a Microscope

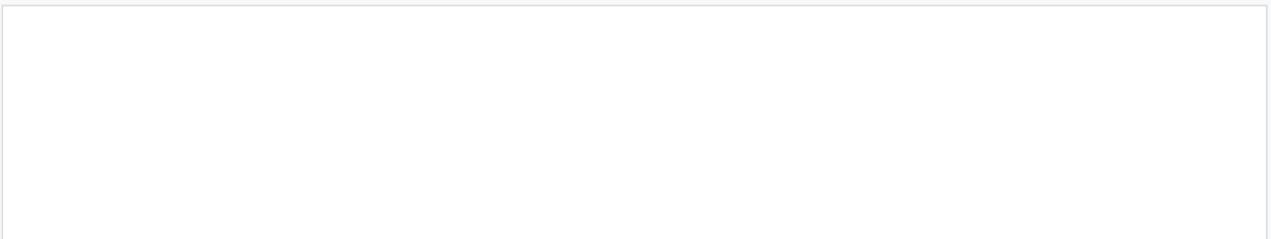
Use a microscope to observe a prepared slide and record your observations.



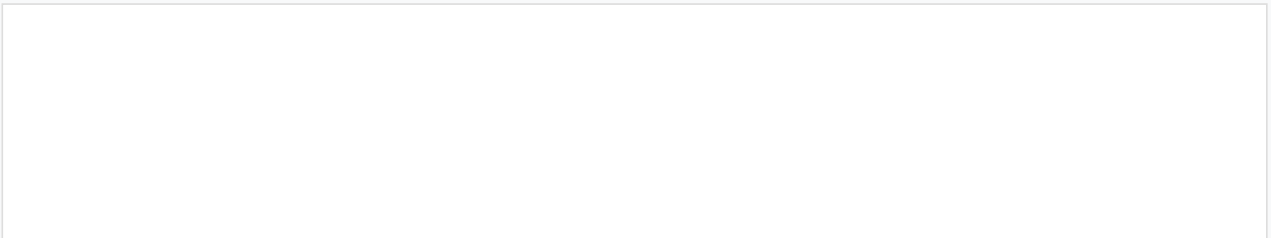
Foundation: Draw a picture of what you see and label the different parts.



Core: Write a short paragraph describing what you see and what you think it is.

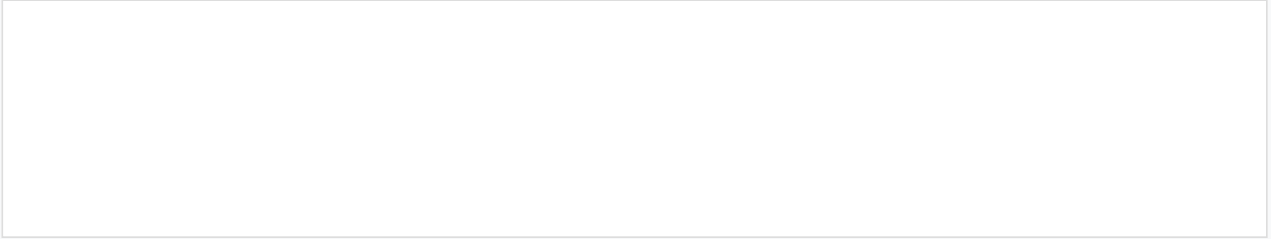


Extension: Measure the size of the object you are observing and calculate its magnification.

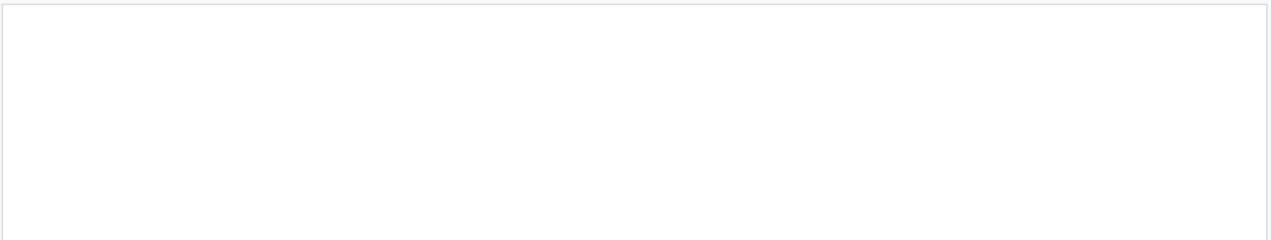


The Microscopic World

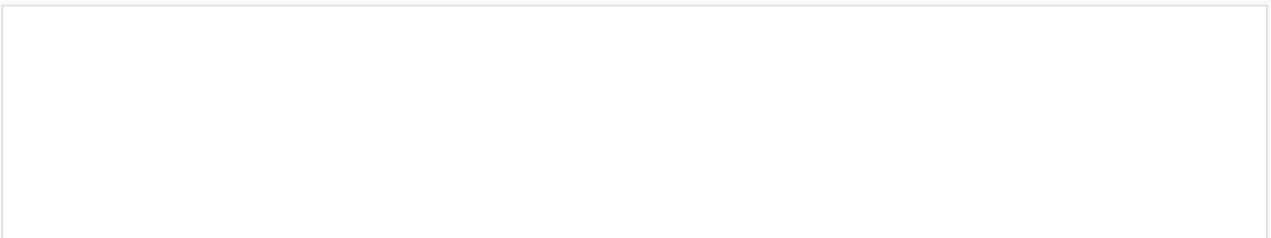
Label the different types of microscopic organisms



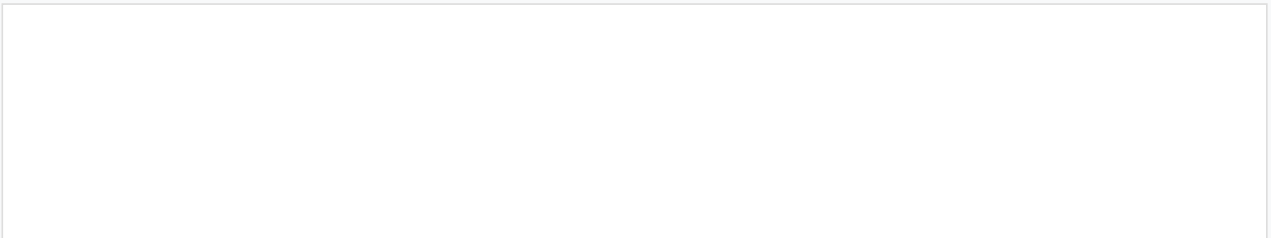
Foundation: Match the microscopic organisms to their characteristics



Core: Describe the different types of microscopic organisms and their habitats



Extension: Research and write about the importance of microscopic organisms in ecosystems.



Microscopes in Forensic Science

Read a case study about how microscopes are used in forensic science

Foundation: What is forensic science? Write a short paragraph explaining the concept.

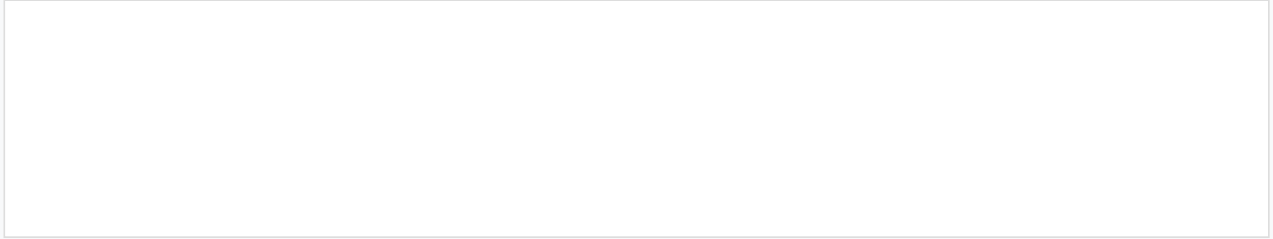
Core: How are microscopes used in forensic science? Write a short paragraph explaining the process.

Extension: Research and write about a famous case where microscopes were used in forensic science.

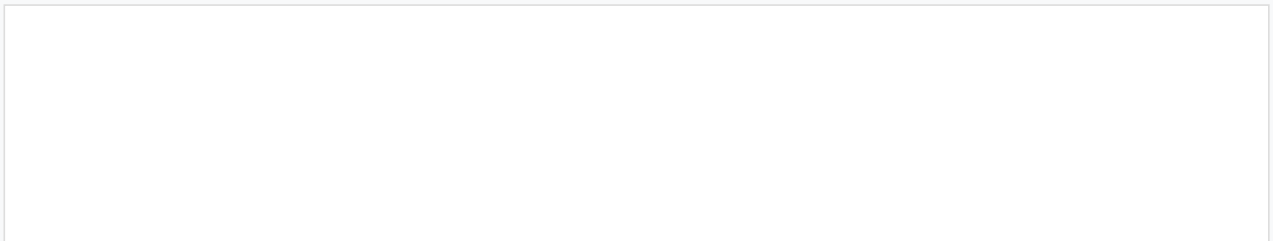
Safety Precautions

Safety Precautions when using Microscopes and Magnifying Lenses

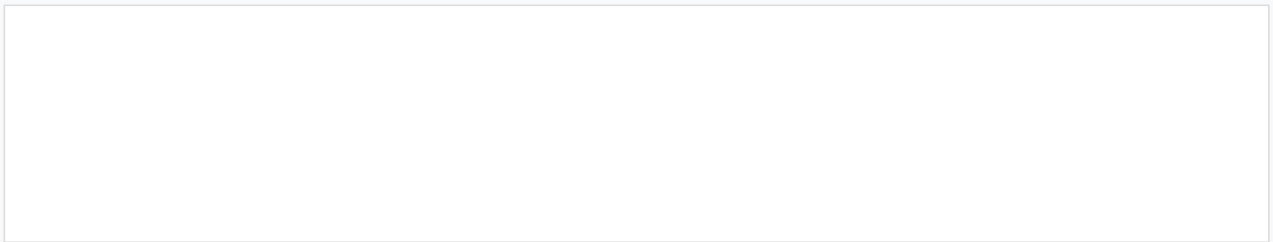
Complete a checklist of safety precautions when using microscopes and magnifying lenses



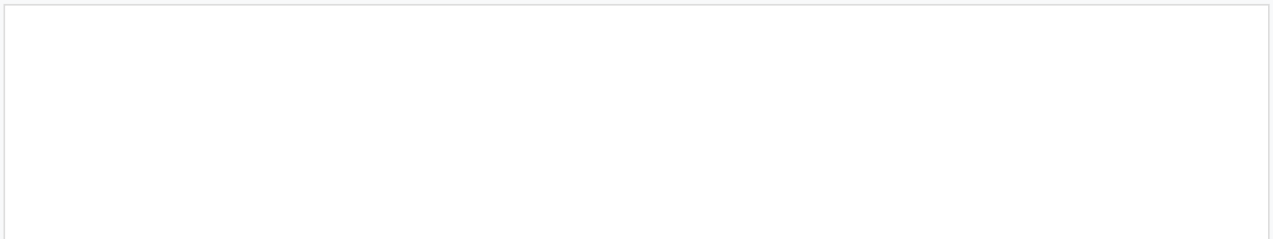
Foundation: What are some safety precautions when using microscopes and magnifying lenses? Draw a picture and label the safety precautions.



Core: Write a short paragraph explaining the importance of safety precautions when using microscopes and magnifying lenses.



Extension: Research and write about the potential hazards of using microscopes and magnifying lenses.



Microscopes and Magnifying Lenses Quiz

Complete a quiz on microscopes and magnifying lenses

Foundation: Multiple choice questions

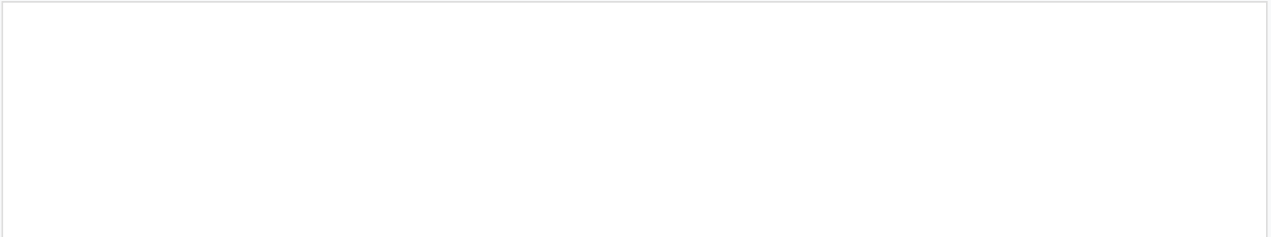
Core: Short answer questions

Extension: Essay question

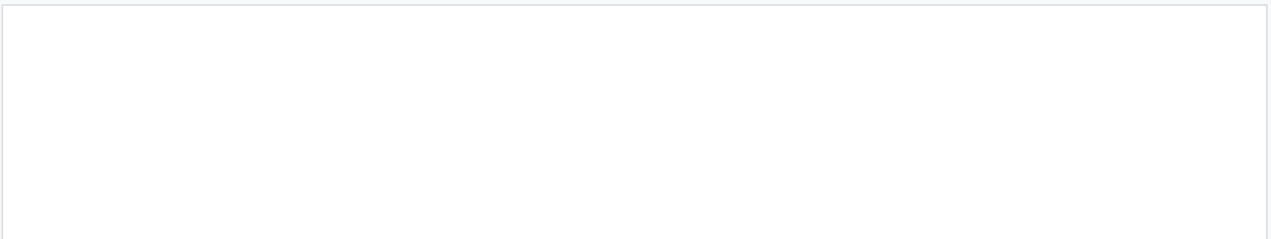
Reflection

Reflect on what you have learned about microscopes and magnifying lenses

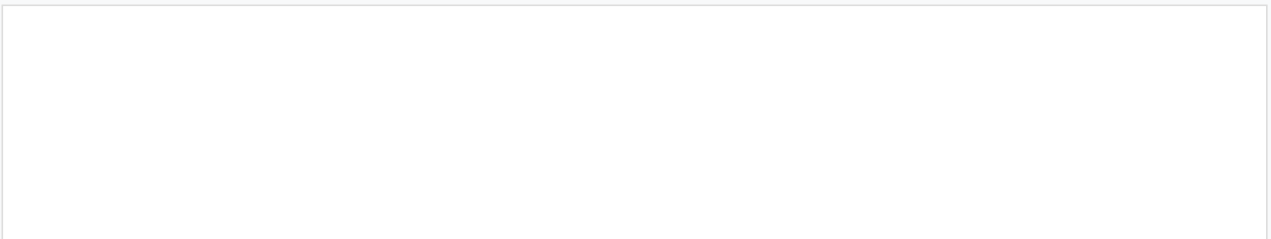
Foundation: What did you learn about microscopes and magnifying lenses? Draw a picture and label what you learned.



Core: Write a short paragraph reflecting on what you learned and how you can apply it in real life.



Extension: Research and write about how microscopes and magnifying lenses are used in different fields, such as medicine and biology.



Conclusion

Summarize what you have learned about microscopes and magnifying lenses

Foundation: What did you learn about microscopes and magnifying lenses? Write a short paragraph summarizing what you learned.

Core: How can you apply what you learned about microscopes and magnifying lenses in real life? Write a short paragraph explaining how you can apply what you learned.

Extension: Research and write about the future of microscopes and magnifying lenses and their potential applications.