

Lesson 4 Compare and Contrast

In this lesson, you will study two kinds of things that are very similar, such as two shells, two feathers, two leaves from similar plants (like two different kinds of oaks), two kinds of similar fruit (like a lemon and orange), two kinds of beetles. You get to choose your subject!

What do we mean by Compare and Contrast?

- This is very important:
- If you are asked to compare two things, you need to tell

HOW THEY ARE THE SAME.

• If you are asked to contrast two things, you need to tell

HOW THEY ARE DIFFERENT.

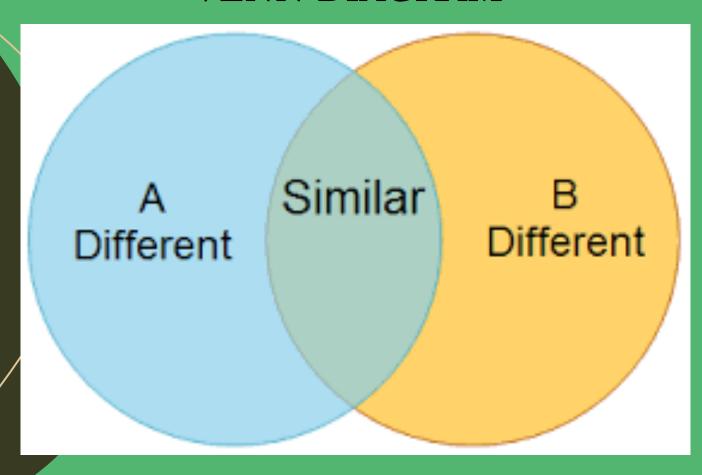
This is so important we need to repeat it.

• Compare: Show how they are the same.

Contrast: Show how they are different.

VENN DIAGRAM

What tool helps you compare and contrast?



MODEL LESSON

- I'm going to show you how to do this journal entry. Then you will select your own subject, journal it, and send your finished journal entry to your teacher.
- As in Lesson 3, you will answer some questions and turn them into a paragraph for your reflection.

Example journal My Mint Study

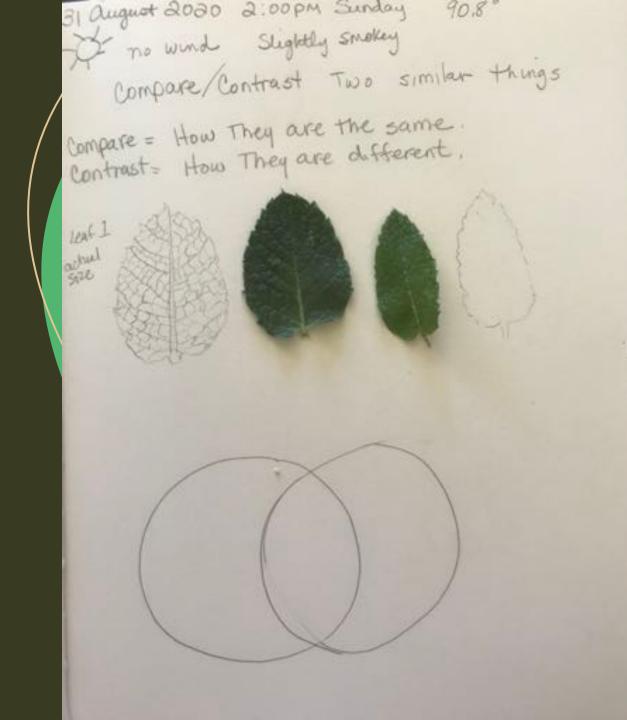


I have two different species of mint growing in the same place in my garden. I'm going to compare and contrast the two mints.



Head your journal with your Metadata

- Drawing strategy: If your subject is small enough, trace it.
- Place you Venn Diagram on your page.



I NOTICE, I WONDER, THIS REMINDS ME OF...

- SELF TALK (I NOTICE, I WONDER, THIS REMINDS ME OF...)
- WRITE YOUR OBSERVATIONS AND DESCRIPTIONS, FILL IN YOUR VENN DIAGRAM AS YOU GO.
- DRAW YOUR TWO SUBJECTS, DO YOUR METRICS (123) AND CONTINUE ADDING TO YOUR VENN DIAGRAM AND "I NOTICE, I WONDER, THIS REMINDS ME OF..."

USE YOUR TOOLS

• 123: USE A RULER OR TAPE MEASURE TO

MEASURE YOUR SUBJECT





USE YOUR HAND LENS OR MAGNIFYING GLASS TO STUDY YOUR SUBJECTS CLOSE UP.

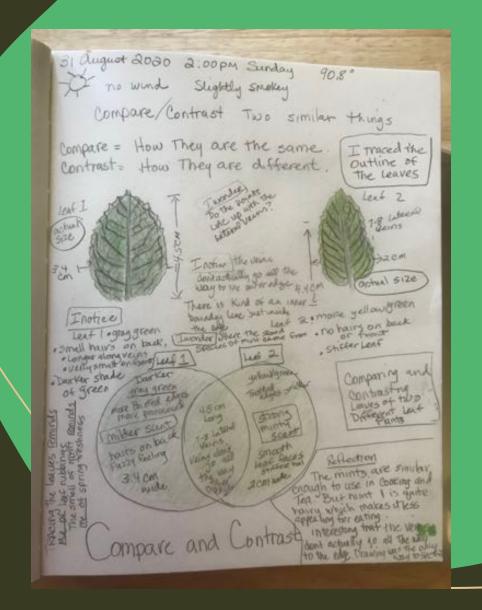
BRING THE LENS UP TO YOUR EYE (LIKE GLASSES) THEN BRING YOUR SUBJECT UP TO THE LENS UNTIL IT'S FOCUSED.



I notice small hairs all along the veins of the underside of the leaf

Add color to your drawings

- Check your page over to make sure you have everything:
- ABC
- 123
- And
- I put my title at the bottom. Where do you want to put yours?
- Don't forget to add Lesson 4 to your Table of Contents.



REFLECTION

- REMEMBER HOW TO DO IT?
- 1. Answer the following questions in QUESTION/ANSWER FORM.
- 1. Number your answers in the order in which you want to write them into your paragraph.
- 2. Begin with a topic sentence and finish with an ending sentence to tie all the answers together.

REFLECTION QUESTION #1 AND #2

NGSS CROSS-CUTTING CONCEPTS: PATTERNS

- 1. What are some patterns you noticed?
 - What features were similar?
 - What features were different?

2. Why might those features be similar or different?

QUESTION/ANSWER FORM

USE AS MANY WORDS FROM THE QUESTION IN YOUR ANSWER.

EXAMPLE: WHAT <u>STATE</u> DO YOU <u>LIVE IN</u>?

Q/A FORM: THE <u>STATE</u> I <u>LIVE IN</u> IS CALIFORNIA.

A little help to get started: Here's how to turn the first question into Q/A Form:

What are some patterns you noticed? What features were similar? What features were different?
 Q/A Form:
 Some of the patterns I noticed were_____, and _____. The features that were similar were_____,

and ____. The features that were different were

_____, and _____.

REFLECTION QUESTION #3 AND #4

- NGSS CROSS-CUTTING CONCEPT: CAUSE AND EFFECT
- 3. Look back at your journal page and focus on the differences between the two subjects. What are some possible causes for the differences you observed?
- 4. What might have caused any of the patterns you observed?

REFLECTION QUESTION #5 AND #6

- NGSS CROSS-CUTTING CONCEPT: STRUCTURE AND FUNCTION
- 5. What were some of the differences you observed? How were the structures (leaves, bark, branches, etc.,) different from one another?
- 6. How might these structures function differently?

YOU'RE READY TO DO YOUR OWN COMPARE/CONTRAST STUDY

GO FIND YOUR TWO SUBJECTS. REMEMEBER, THEY NEED TO BE VERY SIMILAR

- AN ORANGE AND A LEMON, A PEACH AND AN NECTARINE
- TWO LEAVES
- TWO SIX-LEGGED INSECTS
- TWO SEED PODS FROM DIFFERENT TREES
- TWO FEATHERS, TWO SHELLS, TWO ROCKS

AND DON'T FORGET...





Tejon Ranch Conservancy

BYE FOR NOW.
THANKS
FOR
JOINING
ME.