BITE MARK LAB ALTERNATE ASSIGNMENT(S)

If you missed Day 1 (Sketching)...

DAY 1 Alternate Assignment

1. Get a large piece of chewy candy or similar medium (material). *LaffyTaffy or something similar will work. *A styrofoam paper plate will also work if you fold it in half. Some foods will work also. You want something you can bite gently into that will leave an **impression** of your teeth.

2. Make an impression of your own teeth by biting into the candy or plate. Do not bite so hard that you go through the material! Be careful not to hurt your teeth. Do not wiggle them around.

3. **PHOTOGRAPH YOUR BITE MARK TO SHOW Ms. LaSOVAGE that you did this step!** (You may email the photo or show her in class)

4. In your notebook, write **“Bite Lab Day 1 Alternate”**

5. Sketch your bite mark! Looking at the mold that you made, draw a picture of your teeth. (NOTE: You only need to do the top set of teeth for this lab.)

6. Now, using a ruler, measure at least 4 different places on your bite mark mold. Record your measurements your sketch. Be exact! I need to know where the measurement starts and ends!

   ![Example Measurement](image)

   **Example:**

7. Make at least two other observations about your teeth/bite mark. These could be unusual positioning or overlapping or missing teeth…anything that might make your bite different from someone else’s.

Additional Hints for Part 1

SEE REVERSE SIDE FOR ADDITIONAL HINTS IN HOW TO COMPLETE THIS ACTIVITY!
If you need help in ideas of how to label and measure your teeth, the information on this page may be helpful.

Compare the impression of your teeth with the diagram. Place the appropriate mark over teeth that exhibit the following characters:

X  Tooth is missing from your impression, but not necessarily from your mouth.
\ Tooth has only a faint impression.
→ Draw an arrow from a tooth pointing in the direction of a misalignment.

Wisdom teeth are often missing, either because they have not yet erupted, or because they have been surgically removed. Front teeth are commonly chipped or misaligned.

Take measurements on your wax impression of the distances between specific teeth in your upper dental arch.

A. 2nd Left Molar to 2nd Right Molar: _______
B. 2nd Left Molar to 1st Right Premolar: _______
C. 2nd Left Molar to Central Right Incisor: _______
D. Right Cuspid to Left Cuspid: _______

**Adult Teeth Diagram**

**Upper Teeth**
- Central Incisor 7-8 yrs
- Lateral Incisor 8-9 yrs
- Canine (Cuspid) 11-12 yrs
- First Premolar (First Bicuspid) 10-11 yrs
- Second Premolar (Second Bicuspid) 10-12 yrs
- First Molar 6-7 yrs
- Second Molar 12-13 yrs
- Third Molar (Wisdom Tooth) 17-21 yrs

**Lower Teeth**
- Third Molar (Wisdom Tooth) 17-21 yrs
- Second Molar 12-13 yrs
- First Molar 6-7 yrs
- First Premolar (First Bicuspid) 10-11 yrs
- Second Premolar (Second Bicuspid) 10-12 yrs
- First Premolar (First Bicuspid) 11-12 yrs
- Canine (Cuspid) 8-9 yrs
- Lateral Incisor 7-8 yrs
- Central Incisor 7-8 yrs
BITE MARK LAB ALTERNATE ASSIGNMENT(S)

If you missed Day 2 (Analysis)

DAY 2 Alternate Assignment

- Prep: Watch this short video: https://www.youtube.com/watch?v=thfHB5e51q8
- Now, download or get a copy of the article “Bite mark evidence: bite mark analysis is not the same as bite mark comparison or matching or identification” by Richard Souviron and Leslie Haller.
- Next, read and annotate (T4) the text.
- Finally, answer the following questions based on the information from the reading. (This can be in your notebook.)

Bite Mark Lab Part 2 Alternate Assignment

1. What is the technical term for a dentist who works on criminal cases?

2. According to the author of this study, what is involved in bite mark analysis? (What information is observed/types of data that are collected?)

3. List at least 3 examples of how analyzing a bite mark can be useful in a criminal case.

4. How is bite mark analysis different than bite mark comparison/matching?

5. Describe how the use of bite marks as evidence has changed over time.

6. Write a statement that relates how either the Frye Standard or the Daubert Ruling apply to bite mark evidence.

7. What is one concern that the author has about the current bite mark use?

8. Restate the author’s thesis (main point) in your own words.

**Here is a website that may also be helpful:
https://science.howstuffworks.com/forensic-dentistry.htm

**Here is another article that may be helpful:
DAY 3 Alternate Assignment

OPTION 1:
Do a short oral presentation of your results from the Deadly Picnic or Fatal Affair assignment. *In front of the class

OPTION 2:
Develop a personal alternate plan with Ms. LaSovage. Plan should include speaking in front of class and demonstrating use of deductive reasoning.

If you missed ALL 3 DAYS of this lab, please complete all three alternate assignments, unless you have made other arrangements directly with Ms. LaSovage.