Sink Your Teeth into Science: Using Bite Mark Evidence to Teach Lab Skills and Logic

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Sketch and Observations
Make a sketch of your mold (the impression in your clay). Measure and record at least 4 distances (quantitative). Write at least 2 additional observations about the teeth that might be unique features or that might help you identify the bite. These are minimums! More is better 😊.

Building The Case! (more space on back)
- Based on your data, which suspect is still a suspect? Justify using at least 3 different pieces of evidence. Include or refer to diagrams if needed.
- Which suspects can be ruled out/exonerated? Justify using evidence. (Address each suspect one at a time.) Include or refer to diagrams if needed.

Tips to Remember:
- An argument is not just facts! You must also tell what they mean! “Fact → what it means!”
- Science is about communication so be sure to be explicit. Don’t make the reader fill in any blanks!
- Avoid using pronouns (it/they/she/he). Always state your claim clearly.
- Use quantitative observations whenever possible and always state what those observations refer to.
- Finally, descriptions are not the same as comparisons – a good argument needs to refer to both and clearly state the area that an aspect is different or similar.
PLAYDOUGH RECIPE

Ingredients
- 1 cup flour
- 1 cup water
- 2 teaspoons cream of tartar
- ½ cup salt
- 1 tablespoon vegetable oil
- (gel or other food coloring)

Instructions
1. Mix together all the ingredients, except the food coloring, in a 2 quart saucepan.
2. Cook over low/medium heat, stirring. Once it begins to thicken, add the food coloring or scent (if using color).
3. Continue stirring until the mixture is much thicker and begins to gather around the spoon.
4. Remove the dough onto wax paper or a plate to cool.
5. Store in airtight container in refrigerator.

I used Crayola Air Dry Clay to make the evidence molds but there are likely other products that will work as well. Be careful to make sure the substance does not shrink when it dries as this will cause discrepancies in the measurements.