**5/6 HOMEWORK**

**TERM 2, WEEK 2, 2018**

This week’s homework focuses on our new topic for Inquiry; ‘Forensic Science’. The task involves two challenges.

**Challenge 1:**

Read the article on ‘How Forensic Dentistry Works’ on the following website:

<https://science.howstuffworks.com/forensic-dentistry3.htm>

You are to answer the following questions in response to the article above:

Q1. Why would an investigator use teeth impressions as evidence?

Q2. What are the different types of teeth impressions?

Q3. What is being analysed when looking at a teeth impression?

**Challenge 2:**

You are to complete the following experiment on teeth impressions at home.

**DENTAL FORENSICS OR THE TEETH CAN TELL**

Materials Lists

|  |  |
| --- | --- |
| Scissors | Scissors |
| Styrofoam plate | Styrofoam plate |
| Marking Pen | Marking Pen |

Forensic dentists assist in crime solving by studying teeth and teeth impressions. Dental records are often used to identify people. Because teeth are one of the hardest substances in the human body, they are frequently well preserved. Dental x-rays or records showing fillings, position of teeth, etc. can help forensic dentists find a match of teeth to the individual. Eighty percent of the time teeth impressions are used to identify unknown victims. As a forensic dentist you will have the chance to match teeth impressions to discover who took the bite?

ActivityThe procedures for making teeth impressions are:

1. Divide the Styrofoam plate (or another material that you may have in your home that will work) into six equal wedges. Cut the wedges.
2. Take two of the wedges and stack them together. Cut off 3 cm from the pointed end of the wedges.
3. Place the two wedges into your mouth as far as possible.
4. Bite down on the wedges firmly and then remove them.
5. Label the top and bottom wedges Top Teeth and Bottom Teeth.
   1. Study the teeth impressions.
   2. Count the number of teeth in the top and bottom impressions.
   3. What other characteristics of the impressions do you notice?
   4. Compare the top teeth impressions to the bottom.
   5. Are there teeth missing, spaces, chips, etc.?

Practice being a forensic scientist by getting your mum, dad or siblings to bite into a piece of cheese and chocolate (anything that will leave an impression). Leave the room while they do it. See if you can identify the individual who took the bite by comparing the impressions in the cheese and the chocolate.

1. Compare these impressions and their characteristics to your own. How do they differ?

**Challenges on Manga High.** These are set at 3 different levels. You can choose a level that you think suits your understanding or try all 3!

**Spelling Words**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| forensic | investigation | indentation | criminal | negotiable | accused |
| science | scene | sabotage | endangerment | negligent | allegation |