Self-Healing Gelatin Post-Assessment

Please answer the following questions and review the answers. Once you are finished please shut your Chromebook so that I know you are finished.

Your username will be recorded when you submit this form.

* Required

1. Chemical compounds made up many long, repeating chains of molecules are called?
   
   Mark only one oval.

   - Monomer
   - Dimer
   - Trimer
   - Polymer

2. What is the ionic charge of a single Calcium ion? *
   
   Mark only one oval.

   - 1 +
   - 2 +
   - 3 +
   - 1 -
   - 2 -
   - 3 -

3. Which of the following is not true about Alkyds? *
   
   Mark only one oval.

   - They were introduced in the 1920's.
   - They are derived from an alcohol and an acid.
   - They are the polymer used to make plastic bottles.
   - They are used in paints.

4. What is the 4th step in the engineering design process? *
   
   Mark only one oval.

   - Brainstorm solutions
   - Identify the problem
   - Select a design
   - Build a prototype
   - Optimize the design
   - Test and evaluate
   - Share the solution
5. If I wanted to prepare a 1 M solution calcium lactate and I had 10 mols of calcium lactate what volume of water would I need (assume the 10 mols of calcium lactate take up 1ml of volume of the entire solution). *
Mark only one oval.
- 10 ml
- 9.999 L
- 9.999 ml
- 1 L

6. What are the individual molecules that make up polymers called? *
Mark only one oval.
- Monomers
- Dimers
- Trimers
- Tetrarmers

7. The individual long chain of a single polymer is held together by *
Mark only one oval.
- Ionic Bond
- Covalent Bond
- Metallic Bond
- Crosslinking

8. A self-healing material can recover its properties after suffering damage restoring the materials performance. *
Mark only one oval.
- Yes
- No
- Maybe