## Unit 2: Lesson 3 – Development of Vaccines

## Activity 1: Types of Vaccines –Toxoid Vaccines Worksheet

- Watch the clip titled *DTaP Vaccine* from the video, "Vaccines and Your Baby": <u>https://www.youtube.com/watch?v=J00cRO4WDHc</u>.
- 2. Fill in the blanks based on your understanding of the video clip:
  - a. DTaP is an acronym for which diseases?
    - i. D\_\_\_\_\_
    - ii. T\_\_\_\_\_
    - iii. P\_\_\_\_\_
  - b. To make the DTaP vaccine, the bacterial \_\_\_\_\_\_ are purified, then treated with a chemical to make them harmless.
  - c. A \_\_\_\_\_\_ that has been made harmless is called a
- Using your Apple mobile device, download the Vaccines on the Go: What You Should Know mobile app, click on "Types of Vaccines". If you do not have an Apple mobile device, access the Children's Hospital of Philadelphia Vaccine Education Center website: <a href="http://www.chop.edu/centers-programs/vaccine-education-center">http://www.chop.edu/centers-programs/vaccine-education-center</a>.
- 4. Conduct additional online research as necessary to complete the following:
  - a. Name a benefit of using just part of a bacteria to make a vaccine.
  - b. Name one disadvantage of using just part of a bacteria to make a vaccine.
  - c. Describe how toxoid vaccines are made.



www.VaccineMakers.org

- d. What is the maximum age at which DTaP should be given, and what immunization against diphtheria, tetanus and pertussis can offer protection to older individuals?
- 5. Create a presentation that summarizes your research about toxoid vaccines. Ensure that your presentation:
  - a. Explains how a toxoid vaccine is made.
  - b. Shows how a toxoid vaccine works.
  - c. Describes the advantages and disadvantages of toxoid vaccines.
  - d. Lists examples of toxoid vaccines.

