**Infection Control Continue**

**Lesson Plan the week of 2/2/15-2/6/15**

Continue-Introduction to the Five Main Classes of Microorganisms and their Characteristics.

**Introduction to Communicable Diseases** (2/2/15-2/4/15)

**Agenda:**

2-2-15 -2-4-15

1. Do Now –Review petri-dishes to write a hypothesis as a conclusion to microorganism present on petri-dish related to scientific experiment washing hands using the different hand washing techniques.

2. **April Bass Bonton Presenter for the Department of Public Safety & Health –**Will introduce CommunicableDiseases and Vaccines.

3. Review Home Work- Google: WHO/Poliomyelitis –1. Answer questions teacher provided about the World Health Organizations’ plan to eradicate polio. 2. Research the difference in OPV and IVP vaccines.

4. Close of Lesson- Classroom discussion and student will post what was learned in the hallway.

5. Independent Study-Student will google 10 Communicable disease and in groups will use **Public Health** **Communicable Disease Chart** to identify, causes, incubation period, treatment, prevention and e. g.

**Agenda:**

2-5-15-2-6-15

1. Movie “Polio In Search of a Cure” (Documentary)

2. Classroom assignment during movie and home work –Answer questions teacher provided about polio

Google-WHO/Poliomyelitis (Polio) - 1. Click on Polio 2. Click on The World Health Organization’s Plan to

Eradicate polio.

3. Classroom Discussions-students thoughts on the topic of children being exempt from taking vaccines.

4. Teacher will clarify misunderstanding.

**MASTERY FOCUS**  **(PL-2, PL-3, I-1, I-6) Principle of Health Science**

**Essential Understanding:** The student recognizes the importance of maintaining a safe environment and eliminating

Hazardous situations. Student will understand that the Principles of infection control is essential to all health care workers, it provides a basic knowledge of how diseases are transmitted and its main emphasis is on prevention of disease transmission.

**Standards: What will students know, understand, and be able to do?**

**Objectives:**

1 Student will be able to identify the 5 main classes of microorganisms by describing the characteristic of each.

2. Student will learn to wash hands according to recommended techniques per the CDC.

3. Student will identify safety practices in all aspects of the health science industry.

**4. Student will identify wellness strategies for the prevention of disease. (Vaccine required for college entrance)**

**5. Students will be able to describe the concerns of communicable disease, epidemics and prevention.**

**6. Students will be able to list the recommended vaccines regulations of the CDC and WHO and the procedure**

**to follow to receive a medical exemption from vaccines**

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| **TEKS**  1 (D), 1 (E), 9 (B), 10 (A) | **ELPS**  [Boggle's World ESL Activities | Project SHINE](http://www.google.com/url?sa=t&rct=j&q=boggle%20esl&source=web&cd=13&cad=rja&uact=8&ved=0CFQQFjAM&url=http%3A%2F%2Fwww.projectshine.org%2Fboggles-world-esl-activities&ei=9OPCVIL2LMy0yAT264GACA&usg=AFQjCNF6zIibOBHiW04Ye4oWHVS43km9Wg)  ( |

**Key Vocabulary: What key terms will my students need to understand?**

**Key Terms:**

Polio Measles Protozoa Eradicated

Rubella Rubiola Rickettsia Medical Exemptions

Mumps Hepatitis B Fungi

Meningococcal DTAP Viruses

TB Skin Test Influenza Bacteria

**Assessment Plan:** Discuss knowledge of key terms.

**Do Now**: 1. Student will write hypothesis to hand washing experiment.

2. Quiz students on vaccines students need to attend college

3. The main classes of microorganism and how they are classified.

4. Write what is the controversy of receiving vaccines or being exempt

From taking them

**Home Word:** 1. Review content related to lesson per website and links-

WHO/Poliomyelitis. Answer questions teacher provided related to polio.

2. Google communicable diseases and write them down (Student will

use list to complete a classroom activity)

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**LESSON CYCLE** I. Students Will learn the key terms and the Characteristics of bacteria, rickettsiae, fungi, protozoa, and viruses and immunizations. Why It Is Important? (**The students need to know the meaning of the key terms and microorganisms to understand the characteristics of pathogens.**

(2/2/15-2/4/15**) -Health Science students must learn the fundamentals of what is needed to prevent the spread of communicable diseases and why the principles of infection control is essential to all health care workers).**

II. Introduction to New Material –

1. **Students will view and discuss a PowerPoint on infection control and the main classes of microorganism (bacteria, fungi, viruses, rickettsiae, and protozoa.**
2. **Review content in text book and handouts.**
3. **Review content related to lesson per website and links. “WHO/Poliomyitis” (**homework**).**
4. **Presenter from Houston City Health Department to review vaccines and diseases.**

**(**2/ 2-15 thru 2/4/15).

III. Guided Practice

1. **Teacher will clarify and check for understanding by asking open-ended questions.**
2. **Teacher will pace the classroom to clarify misunderstanding.**
3. **Teacher will introduce content to be learned and review key terms.**
4. **Teacher will demonstrate skill practices.**
5. **Teacher will review agenda and objectives daily**
6. **Teacher will review resources and equipment needed to problem solve student centered lessons**.
7. **Teacher will provide a study guide to prepare for 6 weeks test**.

IV. Independent Practice

1. **Student to define and write key terms.**
2. **Student to take notes from PowerPoint.**
3. **Student to complete homework**
4. **Student to complete worksheets in class**
5. **Student to monitor petri-dished for bacteria or fungi growth**
6. **Groups will work independently to study bacterial infectious diseases.**

V. The Closing – **Classroom discussions to check for understanding. Ask students did we meet and learn the objectives for the day. Play kahoot or other games to check for mastery. Clarify misunderstanding.**

**How will I engage my students in learning? How will I lead my students to mastery?**

**CHECKS FOR UNDERSTANDING (I-2)**

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| --- | --- |
| 1. **Engage and Connect (30-min):**   **Do Now:** 15 minutes  Hands on group activity  Independent practice  Online group studies.  Group activity –Problem solve questions related to communicable disease, incubation period, cause and treatment using the State Health Departments’ **Communicable Disease Chart**. **2/2/15-2/4/15** | Review Do Now  Clarify misunderstanding  Allow students to demonstrate |
| 1. **Introduce New Learning (15-20 min):**   PowerPoint- Review Microorganism and standard precautions.  **Movie ” In Search of the Polio Vaccine” (done)**  Demonstrate skill practice  Explain why infection control protects healthcare workers and patients by preventing the spread of diseases.  Introduce nosocomial infections.  **Presenter** **April Bass Bonton**-Introduction to vaccines and Communicable diseases. **2/2/15-2/4/15.** | Student provide feedback by demonstrating skills.  Student are able to voice why lesson is important during guided questions  Student provide feedback on the controversy of children exempt from taking vaccine |
| 1. **Lead Guided and Independent Practice (25 min):**   **Guided Practice (10 min):**  Demonstrate and explain why assignment is important for health care workers to be knowledge able of the disease process and how the lesson  Content learned will help spread infectious diseases and eliminate hazardous situations.  **Independent Practice (25-30 min):** | Clarify misunderstanding. By asking questions and reteach material as needed.  Problem solve case studies to complete  the chain of infection.(**completed)**  Grow bacteria and fungi (completed)  Practice putting on and removing sterile gloves. (**completed**)  Complete Scientific Method to a conclusion to make a hypothesis.  Complete lab worksheet  Complete homework |
| 1. **Close the Lesson and Assess Mastery (10 min):** | Check understanding by open ended questions involving all students.  Play Kohoot.  Exit ticket  Quizzes  Peer Review  Feedback  Accountable talk.  Test (six week) |

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**DIFFERENTIATION (I-3)**

**How will I scaffold and/or accelerate learning? For whom? How will I group my students?**

**SCAFFOLD:** Nova hands on activity “Which wash win” **Internet research, Introduce slides of bacterial infections as Staph and nosocomial infections (infections acquired while hospitalized.)**

Research -**The World Health Organizations plan to eradicate polio 2013-2019.**

**ACCELERATE:** Have students read case studies out loud and use prior knowledge learn to problem solve.

**Group activity-** Student test hand washing techniques (hand sanitizer, soap, antibacterial soap, wash with just water, control-no water (will swab hands and grow and record growth of bacteria and fungi over a 4 day period.) **To write a hypothesis**.

**Answer questions and review slides of bacteria causing diseases. (**Completed)

**GROUP:** Group according to academic level (high performing students grouped with lower performing students. (4-5 students per group). ESL student grouped with a Spanish speaking student.

**LOGISTICS** **(I-6, I-10)**

**What materials, resources, and technology will I need to prepare and arrange?**

* Text Book
* Nova Handouts “Wish wash wins”
* Petri-dish
* Soap
* Hand sanitizer
* Antibacterial soap
* Tongs
* Q-tips
* Lab-top (technology based lesson)
* [www.medininet.com/bacterial.../article.htm](http://www.medininet.com/bacterial.../article.htm)
* Diversified Health Occupational PowerPoint
* Case studies
* Chain of infection template
* Beets