**TWS Standard 4: Design for Instruction**

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| **Unit Scope and Sequence** | | | | |
|  | **Lesson Topic** | **Sequence of Lesson: Instructional and Engagement Strategies** | **Measurement of Learning** | **Adaptations: Determined by the Student Factors** |
| ***Day 1*** | ***Conduction***  ***Convection***  ***Radiation*** | ***Starter: Note cards with visuals and examples***  ***Lesson: PowerPoint presentation with plenty of visuals and three short videos (2 mins each)***  ***Closer: playing a game with the examples the students are given on their notecards*** | ***Students will be measured on how well they can answer questions during the presentation, their post test, and their note card manipulations during the game.*** | ***No students in this classroom have an IEP or learning disability. However, this class will be instructioned with visuals, real life examples, group discussions. This is the highest academic achieving class of the 4.*** |
| ***Day 2*** | ***Food Webs*** | ***Starter: hands on (visual) manipulative with partners (cooperative learning)***  ***Lesson: Power Point Presentation with visuals, videos, and a song about Food webs at the end*** | ***Post test, hands on manipulations*** | ***One student does not speak any English. He speaks only Portuguese (but still knows little of his own language). For this class, I will ensure that plenty of visuals are included and use simpler words to describe definitions in order to accommodate his limited auditory comprehension.*** |
| ***Day 3*** | ***Symbiotic Relationships*** | ***Starter: activating prior knowledge with group discussion***  ***Lesson: Power Point Presentation with visuals, videos, real life examples***  ***Closer: Charades with students and vocabulary words*** | ***Oral comprehension***  ***Post test***  ***Written answers with group members*** | ***I have 4 students in this classroom with an IEP. Therefore, I will ensure that this lesson is taught at a fairly slower pace. By including videos of animals to show the relationship amongst the different types of symbiotic relationships, students will be able to use the visuals as guides to comprehension.*** |
| ***Day 4*** | ***Plate Tectonics*** | ***Starter: Activation question to engage students in critical thinking***  ***Lesson: PowerPoint Presentation with visuals, videos, and real life examples. Group discussion, critical thinking questions, cooperative learning is used throughout the lesson***  ***Closer: Students have to guess which Plate boundary formed the image that is shown (provided by teacher) on the board*** | ***Post Test***  ***And critical thinking questions given at end of lesson.*** | ***There are no students on an IEP in this class. I plan on using 3D hands on manipulative to teach students about plate tectonic movement. Using the senses for this lesson plan is designed to engage all students in learning.*** |
| ***Day 5*** | ***Conduction Convection***  ***Radiation*** | ***Cooperative learning, visual aid, and strategic planning game*** | ***Post Test***  ***Game*** | ***A Lab experiment will be done with hot water, cold, water, and room temperature water for all students to visually see how heat rises (using food coloring to distinguish the two). Because this is a class without any IEP’s the lab will go relatively quickly and the students will be able to get with a partner and silently act out either Conduction, Convection, or Radiation (their choice) and the rest of the class will have to guess. This interactive learning makes learning fun and exciting for all students.*** |