## Science

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| **UNIT TITLE: Life Cycles** | | | | |
| **LESSON: 4/10 – Creating a Visual representation of each stage of the butterfly life cycle.** | | | **Year 4 Stage 2** | |
| Science and Technology - Living Things S2.3:  Identifies and describes the structure and function of living things and ways in which living things interact with other living things and their environment.  English - (Talking and Listening) TS2.1  Communicates in informal and formal classroom activities in school and social situations for an increasing range of purposes on a variety of topics across the curriculum.  English - (Reading and Viewing) RS2.5  Reads independently a wide range of texts on increasingly challenging topics and justifies own interpretation of ideas, information and events.  English - (Reading and Viewing) RS2.7  Discusses how writers relate to their readers in different ways, how they create a variety of worlds through language and how they use language to achieve a wide range of purposes.  Visual Arts- (Appreciating)  VAS2.4 Identifies connections between subject matter in artworks and what they refer to, and appreciates the use of particular techniques. | | | **ASSESSMENT:**   * questioning students throughout lesson * engagement in discussion and contribution to group discussions * observing students engagement in the lesson * correct use of group work time * appropriate class result * peer feedback of group work * skills of investigating in groups | |
| **PART AND TIMING** | **SUBJECT MATTER** | **Teaching practice** | | **Resources/Organisation** |
| **Introduction - 5-10 mins**  **Allowing students to link prior knowledge with new knowledge will ensure they create cognitive learning links that enable students to recognise features and access information quickly.**  **Discussion amongst students ensures individuals will gain multiple insights into information.** | **TS2.1 Communicates in informal and formal classroom activities in school and social situations for an increasing range of purposes on a variety of topics across the curriculum.**   * *listens to sustained information reports on familiar and researched topics* * *gives sustained information reports on generalised, researched topics listens to more complex explanations of simple phenomena* | * Discuss with students what they learnt in the previous lessons. * Ask students what the different stages of the life cycle of a butterfly are. * Brainstorm on the board the different stages of the life cycle: First Stage: The egg   Second stage: The Larva  Third Stage: The Pupa  Fourth Stage: The adult butterfly.   * Show the students the website they viewed last lesson and get the students from each stage present to the rest of the class in detail what happens in their stage. * Show students images of the butterfly life cycle and get the students to find the images that are appropriate for their stage. * When children are matching their images with their stage ask questions like why does this image belong to your stage? Students use technical language that belongs to their stage. Teacher records such technical words on the board under appropriate stage. (students may refer to this whilst making their diagrams) | | * Images   <http://www.wyllz.com/id177.htm>   * website from previous lesson.   Specifically on life cycles within the website:<http://www.thebutterflysite.com/life-cycle.shtml>  Students are seated in front of the board on the floor. |
| **Body: (45 minutes)**  **By going through the activity step-by-step and giving examples, the teacher is able to guide students along whilst enabling them to use their own previous knowledge and ideas to further expand upon the activity.**  **Encouraging students to be creative will facilitate the engagement within the activity, as well as expanding the knowledge and ideas of students.** | Selects and uses a range of equipment, computer-based technology, materials and other resources with developing skill to enhance investigation and design tasks.  *•* **RS2.8 Discusses the text structure of a range of text types and the grammatical features that are characteristic of those text types.**  ***Text Structure***   * *recognises the structure of a range of more complex text types* * *recognises cohesive links in a text, eg referring words/ pronouns.*   Channel of Communication  • uses illustrations and diagrams where relevant. | * Teacher explains that students will be working with their group to create a visual diagram appropriate to their stage. * Ask students what type of text would need such a visual. (explanation) * Discuss why explanations have visuals that go along with the text. What is the role for the reader? * Teacher shows examples of different diagrams to the class.   What do they have all in common? How do they relate to the text?   * Discuss as a class all the different features a diagram would need.   -title, labels, image, glossary.   * Observe students throughout group work and determine their input and contribution to work. * Students come back together as a class, and present their visual diagram. * Encourage class discussion and peer assessing by asking questions like: What else could this group include in their diagram?. | | * encyclopaedias, books, laptops, desktop computers, home readers (about butterflies) etc - any resource with information about butterflies. * large pieces of cardboard * coloured paper * coloured textas * Glue sticks * Scissors   Students are seated on the ground, then in groups working on a diagram that depicts the specific stage of the life cycle, then are back in a group on the floor. |
| **Conclusion - 5 to 10 mins**  **Students are to evaluate their own work and the other students', thus grasping a firm idea of what was achieved throughout the lesson.** | **RS2.7 Discusses how writers relate to their readers in different ways, how they create a variety of worlds through language and how they use language to achieve a wide range of purposes.**  ***Purpose***   * *recognises and describes the purpose of a narrative, recount, procedure, information report , explanation.* | * Align the diagrams in sequential order and discuss the final presented poster - is anything missing? Is the presentation appropriate for representing a butterfly’s life cycle? What could be added in the future to make the visual diagram more appealing (e.g. pictures, larger titles, more labels, a glossary) * How can we represent the life cycle’s sequence? Through arrows or other line vectors? What does this suggest (e.g. that one stage leads to another) and how does the text connectives contribute to these vectors? (e.g. they ensure the sequence is established). * Students have the skills to create a joined classroom diagram of the butterfly’s life cycle. Discuss how they can create a visual diagram that will best represent each group’s information and ideas. | | * Finished class diagrams.   Students are seated in front of the board on the floor. |
| **Lesson Evaluation:** Did students achieve the lesson outcomes? If not, what would need to be modified to enhance student learning?  Were students engaged in the learning throughout the process? Why/why not was this the case?  Did the students understand the relevance of the concepts explored? In what ways was this evident?  Were the concepts explored relevant for subsequent lessons? How?  Were the works finished or was there not enough time? How could this be improved?  How were students motivated to achieve a finished piece of work?    How effectively did students contribute to editing and creating final piece of work? | | | | |