WEEK 10

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| **Week Ending:** | | | **Day:** | **Subject:** Computing | | | |
| **Duration:** 60MINS | | | | **Strand:** Computational thinking | | | |
| **Class:** B7 | | | **Class Size:** | **Sub Strand:** Artificial Intelligence | | | |
| **Content Standard:**  B7.4.4.1. Discuss Artificial intelligence concepts | | **Indicator:**  B7.4.4.1.1 Discuss the application of various areas of artificial intelligence | | | | | **Lesson:**  1 of 1 |
| **Performance Indicator:**  Learners can discuss the application of various areas of artificial intelligence | | | | | **Core Competencies:**  Creativity and Innovation, Comm & Collaboration, Digital Literacy,  Critical thinking and Problem solving. | | |
| **Reference:** Computing Curriculum Pg. 22 | | | | | | | |
| **New words:** Machine Learning (ML), Artificial Neural Networks (ANN), Virtual Reality (VR), Augmented Reality (AR), Gamification | | | | | | | |
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| Phase/Duration | Learners Activities | | | | | Resources | |
| PHASE 1: **STARTER** | Show a collage of images: self-driving car, VR headset, mobile game, robot playing chess, person wearing AR glasses.  Ask students:  "What do you think connects all these pictures?"  Take quick guesses and say, "They are all results of Artificial Intelligence!" | | | | |  | |
| PHASE 2: **NEW LEARNING** | Explain briefly:  Artificial Intelligence (AI) helps machines think, learn, and interact like humans.  Different areas of AI focus on different kinds of learning and experiences.   |  |  |  | | --- | --- | --- | | Area | Explanation | Example | | Machine Learning (ML), | Computers learn from data without being programmed explicitly. | YouTube recommendations, voice recognition (Siri). | | Artificial Neural Networks (ANN) | Networks like a human brain help computers recognize patterns. | Recognizing handwriting or detecting faces in photos. | | Virtual Reality (VR) | A complete digital environment you can step into. | VR gaming headsets, virtual museum tours. | | Augmented Reality (AR) | Adds digital objects to the real world through devices. | Pokémon Go, Snapchat filters. | | Mixed Reality (MR) | Combines real and virtual worlds, interacting with both. | Microsoft HoloLens demo. | | Gamification | Using game elements like points and badges in learning or apps. | Duolingo, Kahoot, fitness apps with achievements. |   Live demonstrate the application of various areas of artificial intelligence.   * Machine Learning:   Show a simple ML model predicting weather based on data (via Google Teachable Machine if possible).   * VR/AR videos:   Short video showing VR rollercoaster and an AR measuring tape app.   * Gamification:   Open a live Kahoot quiz to show how gamification works.  Divide students into groups. Each group picks an AI area.  In 5 minutes:   * Write a simple definition in their own words. * Think of one more real-life example. * Share with the class.   Assessment   1. What is Machine Learning in simple words? 2. Name one thing you can do with Virtual Reality. 3. How is Augmented Reality different from Virtual Reality? 4. What is an Artificial Neural Network designed to act like? 5. How does Gamification make learning or apps more interesting? | | | | | Charts and pictures | |
| PHASE 3: **REFLECTION** | Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.  Take feedback from learners and summarize the lesson. | | | | |  | |

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| **Content Standard:**  B7.4.4.1. Discuss Artificial intelligence concepts | | **Indicator:**  B7.4.4.1.1 Discuss the application of various areas of artificial intelligence (Machine learning, Artificial Neural Networks, Virtual Reality, Augmented Reality, Mixed Reality, Gamification | | | | | **Lesson:**  1 of 1 |
| **Performance Indicator:**  Learners can discuss the application of various areas of artificial intelligence | | | | | **Core Competencies:**  Creativity and Innovation, Comm & Collaboration, Digital Literacy,  Critical thinking and Problem solving. | | |
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| Phase/Duration | Learners Activities | | | | | Resources | |
| PHASE 1: **STARTER** | Write on the board: "What do you think Artificial Intelligence does for us every day?"  Let students share quick ideas (even if they are funny or imaginative — all ideas welcome). | | | | |  | |
| PHASE 2: **NEW LEARNING** | Explain briefly: AI is when machines or computers perform tasks that normally require human thinking — like understanding language, recognizing pictures, learning from experience, or making decisions.  Show a short video (1–2 minutes) highlighting examples like Siri, self-driving cars, medical robots, and smart assistants.   |  |  |  | | --- | --- | --- | | Area | Uses | Important | | Healthcare | AI helps doctors diagnose diseases faster. | Saves lives, improves healthcare access. | | Transportation | AI powers self-driving cars and smart traffic systems. | Reduces accidents, makes travel safer. | | Education | AI provides personalized learning apps and tutoring bots. | Helps students learn better and faster. | | Communication | AI improves translations, voice recognition, and chatbots. | Connects people worldwide easily. | | Business/Banking | AI detects fraud and improves customer service. | Makes banking safer and services faster. | | Environment | AI predicts natural disasters and monitors climate change. | Protects nature and saves lives. |   Engage learners in a Think-Pair-Share Activity:  Think: Students list 2 ways AI helps them personally (example: Google Translate helps with homework).  Pair: Discuss with a partner.  Share: Selected pairs share their ideas with the class.  Task students to create a mind map (digital or paper) with the title: "How AI Helps Our World"  Include at least 4 branches (Healthcare, Education, Transportation, and Communication) and 1 example each.  Add simple drawings or icons if possible!  Assessment   1. What does Artificial Intelligence (AI) mean? 2. Name one way AI helps doctors. 3. How does AI help us travel safely? 4. Name one AI tool that improves communication. 5. Why is AI important for protecting the environment? | | | | | Charts and pictures | |
| PHASE 3: **REFLECTION** | Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.  Take feedback from learners and summarize the lesson. | | | | |  | |