**2024 GRADE 7 STORY MOJA COMPUTER SCIENCE SCHEMES OF WORK TERM 2**

**TEACHER’S NAME……………………………….SCHOOL………………………..TERM…………………..**

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| **Week** | **Lesson** | **Strand** | **Sub-Strand** | **Specific-Learning Outcomes** | **Learning Experiences** | **Key Inquiry Questions** | **Learning**  **Resources** | **Assessment Methods** | **Reflection** |
| 1 | 1 | COMPUTER HARDWARE CONCEPTS | Categories of computer hardware | By the end of the lesson, the learner should be able to:   1. Identify categories of computer hardware. 2. Draw examples of hardware devices. 3. Appreciate the categories of hardware devices. | Learners are guided in pairs, in groups or individually to:  Identify categories of computer hardware.  Give examples of category hardware device.  Draw examples of hardware devices. | Which hardware device do you use? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 67-69  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 2 | COMPUTER HARDWARE CONCEPTS | Functions of computer hardware devices | By the end of the lesson, the learner should be able to:   1. Identify functions of computer hardware devices. 2. Match categories of hardware to their functions. 3. Appreciate the functions of computer hardware devices. | Learners are guided in pairs, in groups or individually to:  Identify functions of computer hardware devices.  Match categories of hardware to their functions.  Select appropriate computer hardware for use. | What are the functions of computer hardware devices? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 69-71  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 3 | COMPUTER HARDWARE CONCEPTS | Using computer hardware in performing daily life activities | By the end of the lesson, the learner should be able to:   1. State the importance of hardware elements. 2. Discuss the role of hardware elements in a computer. 3. Have fun using computer hardware in performing daily life activities. | Learners are guided in pairs, in groups or individually to:  Define the term hardware.  State the importance of hardware elements.  Discuss the role of hardware elements in a computer.  Use different elements of computer hardware. | What is hardware?  What is the role of hardware elements in a computer? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 71-72  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 2 | 1 | INPUT DEVICES | Input devices in a computer system | By the end of the lesson, the learner should be able to:   1. Identify input devices in a computer system. 2. Match input devices to their respective categories. 3. Have a desire to learn more about input devices. | Learners are guided in pairs, in groups or individually to:  Identify input devices in a computer system.  Identify categories of input devices.  Match input devices to their respective categories. | What is an input device? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 72-77  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 2 | INPUT DEVICES | Selecting appropriate input devices for use | By the end of the lesson, the learner should be able to:   1. Identify factors to consider when selecting an input device for use. 2. Assess user computing needs and selecting appropriate input devices for different situations. 3. Use input devices to perform tasks. | Learners are guided in pairs, in groups or individually to:  Identify factors to consider when selecting an input device for use.  Assess user computing needs and selecting appropriate input devices for different situations.  Reuse input devices to reduce wastage. | Which factors will you consider when selecting an input device? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 78-80  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 3 | CENTRAL PROCESSING UNIT (CPU) | Locating the CPU in a computer | By the end of the lesson, the learner should be able to:   1. Watch a video that shows the location of the CPU in a computer. 2. Draw a CPU in their exercise books. 3. Appreciate the use of CPU. | Learners are guided in pairs, in groups or individually to:  Explain the meaning of CPU and motherboard.  Watch a video that shows the location of the CPU in a computer.  Draw a CPU in their exercise books. | What is CPU?  What is a motherboard? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 80-82  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 3 | 1 | CENTRAL PROCESSING UNIT (CPU) | Functional elements of the CPU | By the end of the lesson, the learner should be able to:   1. Identify functional elements of the CPU 2. Watch a video simulation of functional elements of the CPU 3. Enjoy consulting a computer expert to discuss the functional elements of the CPU. | Learners are guided in pairs, in groups or individually to:  Define the term computer bus.  Identify functional elements of the CPU  Watch a video simulation of functional elements of the CPU | What are the functional elements of the CPU? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 82-84  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 2 | CENTRAL PROCESSING UNIT (CPU) | Types of processors used in computing devices | By the end of the lesson, the learner should be able to:   1. Identify types of processors used in computing devices. 2. Navigate computer system specifications to determine the type of processor in a computer. 3. Appreciate the different types of processors. | Learners are guided in pairs, in groups or individually to:  Explain the uses of hertz (HZ)  Identify types of processors used in computing devices.  Navigate computer system specifications to determine the type of processor in a computer. | What is a processor? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 84-85  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 3 | CENTRAL PROCESSING UNIT (CPU) | The role of processors in computers | By the end of the lesson, the learner should be able to:   1. Identify part of the CPU responsible for performing arithmetic operations. 2. Discuss the role of processors in a computer. 3. Appreciate the different types of processors. | Learners are guided in pairs, in groups or individually to:  Identify part of the CPU responsible for performing arithmetic operations.  Discuss the role of processors in a computer.  Use computers with different types of processors to perform tasks. | Why do computers have processors? | StoryMoja Computer Science Learner’s Book Grade 7 pg.  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 4 | 1 | OUTPUT DEVICES | Identifying output devices in a computer system | By the end of the lesson, the learner should be able to:   1. Compare hard copy output and soft copy output. 2. Match output devices into their appropriate categories. 3. Have a desire to learn more about output devices. | Learners are guided in pairs, in groups or individually to:  Identify output devices in a computer system.  Compare hard copy output and soft copy output.  Match output devices into their appropriate categories. | What is an output device? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 87-90  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 2 | OUTPUT DEVICES | Functions of output devices in a computer system | By the end of the lesson, the learner should be able to:   1. Visit a computer user environment such as a computer lab. 2. Discuss and demonstrate the various functions of output devices. 3. Have fun consulting a computer hardware engineer. | Learners are guided in pairs, in groups or individually to:  Visit a computer user environment such as a computer lab.  Discuss and demonstrate the various functions of output devices.  Consult a computer hardware engineer. | What are the functions of output devices in a computer? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 90-92  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 3 | OUTPUT DEVICES | Selecting appropriate output device for different situations | By the end of the lesson, the learner should be able to:   1. Identify factors to consider when selecting an output device. 2. Select appropriate output devices for different situations. 3. Have fun using available output devices to perform assigned tasks. | Learners are guided in pairs, in groups or individually to:  Identify factors to consider when selecting an output device.  Select appropriate output devices for different situations.  Use available output devices to perform assigned tasks. | Which factors will you consider when selecting an output devices? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 92-94  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 5 | 1 | PORTS AND CABLE | Identify cables and ports used in computer systems | By the end of the lesson, the learner should be able to:   1. Identify cable and ports used in a computer system. 2. Discuss types of cables and ports used in computer system. 3. Enjoy consulting a computer expert. | Learners are guided in pairs, in groups or individually to:  Identify cable and ports used in a computer system.  Discuss types of cables and ports used in computer system.  Draw different kinds of ports. | What is a port? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 95-98  Pictures  Computing devices | Oral questions Oral Report Observation |  |
|  | 2 | PORTS AND CABLE | Relating ports to their corresponding cable | By the end of the lesson, the learner should be able to:   1. Identify different ports and cables in a computer system. 2. Relate ports to their corresponding cables. 3. Have a desire to use different kinds of ports. | Learners are guided in pairs, in groups or individually to:  Identify different ports and cables in a computer system.  Relate ports to their corresponding cables. | Which port will you use to your computer? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 98-100  Pictures  Computing devices | Oral questions Oral Report Observation |  |
|  | 3 | PORTS AND CABLE | Connecting cables to ports | By the end of the lesson, the learner should be able to:   1. Discuss and demonstrate how to use cables and ports appropriately. 2. Connect cables to their corresponding ports. 3. Participate in communal activities. | Learners are guided in pairs, in groups or individually to:  Consult a computer user.  Discuss and demonstrate how to use cables and ports appropriately.  Connect cables to their corresponding ports. | What have you learnt about ports and cables? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 100-102  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 6 | 1 | COMPUTER SETUP | Problems experienced when setting up computers | By the end of the lesson, the learner should be able to:   1. Identify problems experienced when setting up computers. 2. Discuss challenges facing users in a computer user environment. 3. Be respectful when engaging with users in the computer user environment. | Learners are guided in pairs, in groups or individually to:  Identify problems experienced when setting up computers.  Discuss challenges facing users in a computer user environment. | Suppose you have acquired a new computer, how do you set it up for use? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 102-104  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 2 | COMPUTER SETUP | Ways of setting up a computer | By the end of the lesson, the learner should be able to:   1. Identify different ways of setting up a computer. 2. Discuss the tools and requirements that one may need when setting up a computer for use. 3. Observe precautions to follow when setting up computers. | Learners are guided in pairs, in groups or individually to:  Identify different ways of setting up a computer.  Discuss the tools and requirements that one may need when setting up a computer for use. | How do you set up a computer? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 104-106  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 3 | COMPUTER SETUP | Setting up a computer for use | By the end of the lesson, the learner should be able to:   1. Discuss the challenges experienced when setting up computers. 2. Devise ways of overcoming challenges experienced when setting up computers. 3. Enjoy setting up computers appropriately. | Learners are guided in pairs, in groups or individually to:  Discuss the benefits experienced when setting up computers.  Discuss the challenges experienced when setting up computers.  Devise ways of overcoming challenges experienced when setting up computers. | What are the benefits of setting up computers?  What are the challenges experienced when setting up computers? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 106-107  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 7 | 1 | COMPUTER SETUP | Booting computers successfully for use | By the end of the lesson, the learner should be able to:   1. Identify E-waste management activity. 2. Reuse or recycle computers parts when setting up computers. 3. Have fun participating actively in communal activities which involve setting up computers. | Learners are guided in pairs, in groups or individually to:  Identify E-waste management activity.  Boot computers successfully for use.  Reuse or recycle computers parts when setting up computers.  Participate actively in communal activities which involve setting up computers. | What is E-waste? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 108-109  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 2 | COMPUTER AND SOCIETY | Physical safety of computers | By the end of the lesson, the learner should be able to:   1. Explain the meaning of physical threat to computers. 2. Discuss and list physical threats to computers in a computer user environment. 3. Appreciate the use of computers in daily life. | Learners are guided in pairs, in groups or individually to:  Explain the meaning of physical threat to computers.  Discuss and list physical threats to computers in a computer user environment. | How can you use computers safely? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 110-111  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 3 | COMPUTER AND SOCIETY | Ways of mitigating physical threats to computers | By the end of the lesson, the learner should be able to:   1. Identify control measures to minimize physical threats to computers. 2. Use appropriate measures to minimize physical threats to computers. 3. Have fun using computers in a physical secured user environment. | Learners are guided in pairs, in groups or individually to:  Identify ways of mitigating physical threats to computers.  Identify control measures to minimize physical threats to computers.  Use appropriate measures to minimize physical threats to computers. | How can you eliminate or minimize physical threats to computers in a computer user environment? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 112-114  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 8 |  |  |  | **MIDTERM BREAK** |  |  |  |  |  |
| 9 | 1 | HEALTH AND SAFETY | Health complications associated with the use of computers | By the end of the lesson, the learner should be able to:   1. List five health complications associated with the use of computers. 2. Discuss health complications associated with the use of computers. 3. Have a desire to minimize health complications associated with the use of computers. | Learners are guided in pairs, in groups or individually to:  List five health complications associated with the use of computers.  Discuss health complications associated with the use of computers.  Practice correct posture when using a computer. | Why do you think your health is at risk when using a computer? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 115-116  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 2 | HEALTH AND SAFETY | Techniques for minimizing health complications associated with the use of computers | By the end of the lesson, the learner should be able to:   1. Discuss appropriate techniques to minimize health complications associated with the use of computers. 2. Share experiences on the safety practices to be observed when using computers. 3. Enjoy using appropriate techniques to minimize health complications associated with the use of computers. | Learners are guided in pairs, in groups or individually to:  Define the term computer ergonomics.  Discuss appropriate techniques to minimize health complications associated with the use of computers.  Share experiences on the safety practices to be observed when using computers. | What is computer ergonomics? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 117-119  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 3 | HEALTH AND SAFETY | Work station | By the end of the lesson, the learner should be able to:   1. Identify ways of organizing a work station. 2. Practise organizing a work station in a manner that minimizes health complications. 3. Have fun organizing a work station to minimize health complications when using computers. | Learners are guided in pairs, in groups or individually to:  Define the term work station.  Identify ways of organizing a work station.  Practise organizing a work station in a manner that minimizes health complications. | What is a work station? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 119-120  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 10 | 1 | REPETITIVE STRAIN INJURY (RSI) | Symptoms of repetitive strain injury | By the end of the lesson, the learner should be able to:   1. Identify symptoms of repetitive strain injury. 2. Identify causes of repetitive strain injury in computer usage. 3. Have a desire to prevent RSI when using a computer. | Learners are guided in pairs, in groups or individually to:  Explain the meaning of repetitive strain injury.  Identify symptoms of repetitive strain injury.  Identify causes of repetitive strain injury in computer usage. | What is repetitive strain injury?  What are the causes of repetitive strain injury? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 120-123  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 2 | REPETITIVE STRAIN INJURY (RSI) | Strategies for preventing repetitive strain injury | By the end of the lesson, the learner should be able to:   1. Identify strategies for preventing repetitive strain injury. 2. Brainstorm on the importance of securing data in a computer. 3. Enjoy using appropriate strategies to prevent RSI when using a computer. | Learners are guided in pairs, in groups or individually to:  Identify strategies for preventing repetitive strain injury.  Brainstorm on the importance of securing data in a computer. | What loss is one likely to suffer if they do not secure the data stored in computers? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 123-125  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 3 | DATA SAFETY IN COMPUTERS | Threats to data in a computer | By the end of the lesson, the learner should be able to:   1. Brainstorm the meaning of data safety, privacy and threat. 2. Discuss threats to data in a computer. 3. Have fun consulting a resource person. | Learners are guided in pairs, in groups or individually to:  Brainstorm the meaning of data safety, privacy and threat.  Define the term hacking.  Discuss threats to data in a computer. | What is data safety?  What is data privacy?  What is data threat? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 125-128  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 11 | 1 | DATA SAFETY IN COMPUTERS | Control measures for securing data in a computer | By the end of the lesson, the learner should be able to:   1. Identify ways of securing data stored in a computer. 2. Discuss control measures to secure data in a computer. 3. Apply control measures to secure data in a computer. | Learners are guided in pairs, in groups or individually to:  Identify ways of securing data stored in a computer.  Discuss control measures to secure data in a computer. | Who is a hacker?  How should we secure data stored in a computer against threats? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 128-131  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 2 | ONLINE SAFETY CONCEPT | Online threats to a computer user | By the end of the lesson, the learner should be able to:   1. Explain the meaning of stalking and identify theft. 2. Discuss online threats to a computer user. 3. Respect the opinions of their fellow learners during the brainstorming session. | Learners are guided in pairs, in groups or individually to:  Brainstorm the terms online safety risks and e-safety.  Explain the meaning of stalking and identify theft.  Discuss online threats to a computer user. | What data do you share online? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 131-134  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
|  | 3 | ONLINE SAFETY CONCEPT | Identifying online safety measures to observe when using a computer | By the end of the lesson, the learner should be able to:   1. Identify online safety measures to observe when using a computer. 2. Share experiences about the importance of online safety when using a computer. 3. Apply online safety measures when using a computer. | Learners are guided in pairs, in groups or individually to:  Identify online safety measures to observe when using a computer.  Share experiences about the importance of online safety when using a computer. | How do you protect yourself from cyber bullying? | StoryMoja Computer Science Learner’s Book Grade 7 pg. 134-138  Pictures  Computing devices  Digital devices | Oral questions Oral Report Observation |  |
| 12-14 |  |  |  | **REVISION & END TERM TWO ASSESSMENT** | |  |  |  |  |