|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name of Subject: Geography** | | | | | | | | |
|  | | | | | | | | |
| **Number of Learners in Class** | *50* | **Week** | *1* | **Duration** | *120 minutes* | **Form** | *SHS 2* | |
| **Strand** | The Earth and Its Neighbourhoods | | | | | | | |
| **Sub-Strand** | The Earth and Its Features | | | | | | | |
| **Content Standard** | Demonstrate an understanding of the internal structure of the Earth and the concept of continental drift | | | | | | | |
| **Learning Outcome(s)** | Identify different types of landforms and describe processes that create them; discuss continental drift with reference to Earth’s shape and movement | | | | | | | |
| **Learning**  **Indicator(s)** | Sketch, label, and describe the internal structure of the Earth | | | | | | | |
| **Essential Question(s)** | What are the three main layers of Earth? How do the characteristics of each layer differ? How does Earth’s internal structure connect to surface processes? | | | | | | | |
| **Pedagogical Strategies** | * **Lesson 1:** Blended approach – Video/model exploration → Collaborative labelling on posters → Group presentations * **Lesson 2:** Characteristics Carousel (3 rotating stations) → Convection simulation demonstration → Whole-class reflection * **21st Century Skills:** Collaboration, communication, critical thinking, creativity * **Learner-Centred:** Active learning, peer support, multiple modes of engagement | | | | | | | |
| **Teaching & Learning Resources** | **Lesson 1:** - Video or physical 3D model of Earth’s layers - Large poster paper (8–10 sheets) - Markers, coloured pencils - Structured worksheets with layer information - Textbooks/printed diagrams - Observation sheets  **Lesson 2:** - Station posters (Crust, Mantle, Core) - Task cards for each station - Reference materials (textbooks, diagrams) - Clear glass beaker, hot water, vegetable oil, food colouring - Spoon/stirring rod - Individual reflection sheets | | | | | | | |
| **Key Notes on Differentiation** | | | | | | | | |
| **Struggling Learners:** - Pair with confident learners in groups - Provide partially completed diagrams/templates - Use visual aids and reference materials - Offer sentence starters and guiding questions  **Confident Learners:** - Challenge with extension questions (e.g., “How would plate movement change if the mantle were cooler?”) - Assign leadership roles (e.g., group presenter, station facilitator) - Encourage deeper analysis and connections to Week 2 content  **All Learners:** - GESI-responsive grouping (mixed gender, mixed ability) - Multiple modes of engagement (visual, kinesthetic, auditory) - Opportunities for verbal and written contributions | | | | | | | | |
| **Lesson** | | | | | | | |
|  | | | | | | | |
| LESSON 1: Understanding and Sketching the Internal Structure of the Earth (120 minutes)  Introduction (20 minutes)   * **Hook:** Show a short video or use a physical model of Earth’s layers * **Guided observation:** Learners complete observation sheet with prompts (e.g., “What are the three layers?” “Which is thickest?”) * **Brief whole-class discussion:** 3–4 learners share observations; clarify misconceptions   Main Lesson (60 minutes)  **Phase 1: Group Task Explanation (5 mins)** - Organise learners into 8–10 groups of 5–6 - Assign roles: Researcher, Illustrator, Labeller, Presenter, Timekeeper - Emphasise GESI principles (mixed gender, paired abilities)  **Phase 2: Collaborative Labelling & Description (55 mins)** - Each group receives large poster with unlabelled Earth diagram - Task: Label three layers, add key characteristics (thickness, composition, temperature, density) - Differentiation: Struggling learners get partially completed diagrams; confident learners add extra details (e.g., Moho discontinuity, density values) - Teacher circulates, asks guiding questions, provides feedback  Closure (20 minutes)  **Phase 3: Group Presentations (15 mins)** - Each group presents poster (2–3 mins) - One member explains layers; another describes characteristics; third discusses importance - Audience listens and notes similarities/differences  **Phase 4: Consolidation (5 mins)** - Whole-class discussion: “What was most interesting?” - Quick formative check  LESSON 2: Explaining Characteristics and Connecting to Surface Processes (120 minutes)  Introduction (10 minutes)   * **Recap Lesson 1:** Review the three layers using Lesson 1 posters * **Essential question:** “How do Earth’s internal layers work together to shape our planet?” * **Learning objective:** Understand layer characteristics and convection currents   Main Lesson (80 minutes)  **Phase 1: Characteristics Carousel (50 mins)** - Organise 3 stations: Crust, Mantle, Core - Divide learners into 3 groups (~17 per station) - Each group rotates through stations (12 mins per station + 1 min transition) - At each station, groups complete task card: define layer, list characteristics, explain importance, answer connection questions - Teacher circulates, provides scaffolding, ensures GESI participation  **Phase 2: Convection Simulation Demonstration (30 mins)** - **Setup:** Clear beaker with hot water, oil, food colouring - **Observation (7 mins):** Learners observe coloured water rising and sinking; oil moves with currents - **Explanation (10 mins):** Connect to mantle convection; explain how this drives plate movement - **Connection (13 mins):** Guided discussion linking convection to continental drift (Week 2 preview)  Closure (20 minutes)  **Phase 3: Reflection & Connection (20 mins)** - Whole-class discussion: “How do convection currents cause crustal plates to move?” - Individual reflection sheet: Learners explain convection, draw diagram, ask remaining questions - Collect sheets to inform Lesson 2 planning | | | | | | | |
| **Key Assessment** | | | | | | | | |
| 1. Formative Assessment (Lesson 1)  **Assessment Mode:** Blended – Individual reflection + Group observation checklist  **Task:** - **Individual 3-2-1 Reflection:** Learners write 3 things learned, 2 things found interesting, 1 remaining question - **Group Poster Checklist:** Teacher observes and ticks criteria (all layers labelled, characteristics included, collaboration evident, visual quality)  **Mark Scheme:** No marks – formative only. Used to identify misconceptions and inform Lesson 2 differentiation.  2. Formative Assessment (Lesson 2)  **Assessment Mode:** Individual reflection + Observation  **Task:** - **Individual Reflection Sheet:** Learners explain convection currents, draw diagram, rate confidence level - **Station Task Completion:** Teacher observes group engagement and accuracy at each station  **Mark Scheme:** No marks – formative only. Informs Week 2 planning and identifies learners needing additional support.  3. Key Assessment for Student Transcript Portal (End of Week 1)  **Assessment Mode:** Class Exercise (individual written task)  **Task:** - Sketch and label the internal structure of the Earth [2 marks] - Explain four (4) characteristics of the crust [8 marks]  **Rubric/Mark Scheme:** - **Labelled diagram:** 2 marks (all three layers correctly identified and positioned) - **Four characteristics of the crust:** 8 marks (2 marks each for any four of: outermost layer, variety of rocks/minerals, thinnest layer, 5–70 km thickness, continental/oceanic crust composition, density 2.7–3.0 g/cm³, Moho discontinuity)  **Total: 10 marks** | | | | | | | | |
| **Reflection & Remarks** | | | | | | | | |
|  | | | | | | | | |