**SCIENCE SCHEMES OF WORK FOR STANDARD SEVEN**

**TERM II**

**REFERENCES:**

* + - 1. SCIENCE IN ACTION PUPILS BOOK7, OXFORD PUBLISHERS
      2. SCIENCE IN ACTION TEACHER’S GUIDE BOOK 7 OXFORD PUBLISHERS
      3. PRIMARY SCIENCE PUPILS BOOK7, JKF PUBLISHERS
      4. PRIMARY SCIENCE TEACHERS GUIDE BOOK 7, JKF PUBLISHERS
      5. UNDERSTANDING SCIENCE PUPILS BOOK7 PUBLISHER

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WEEK** | **LESSON** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **ACTIVITIES** | **ACTIVITIES** | **RESOURCES/** | **REFERENCES** | **ASSESSMENT** | **REMARKS** |
| **1** | **REPORTING AND PREPARATION** | | | | | | | | |  |
| **2** | **1** | **Water** | **Water pollution** | **By the end of this topic the learner should be able to explain the meaning of water pollution** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg 59**  **TG - 7 pg 30**  **-PSC-7 PB pg60**  **-TG-7 pg33** | **Oral exercise** |  |
| **2** |  |  | **By the end of this topic the learner should be able to explain ways in which water get polluted** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg 60**  **TG - 7 pg 30**  **-PSC-7 PB pg64**  **-TG-7 pg34** | **Drawing and labelling** |  |
| **3** |  | **Effects of water pollution** | **By the end of this topic the learner should be able to describe effect of water pollution on plants** | * **Discussion** * **Explanation** * **Demonstratin** * **obsevation** | * **Discussion** * **Explanation** * **Demonstratin** * **obsevation** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg60**  **TG - 7 pg 30**  **-PSC-7 PB pg65**  **-TG-7 pg35** | **Written questions** |  |
| **4** |  |  | **By the end of this topic the learner should be able to describe effect of water pollution on animals** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Resource person** | **SCIA – 7 pg 60**  **TG - 7 pg 29**  **-PSC-7 PB pg65**  **-TG-7 pg35** | **Filling in bank spaces** |  |
| **5** |  |  | **By the end of this topic the learner should be able to describe effect of water pollution on soils** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg61**  **TG - 7 pg 31**  **-PSC-7 PB pg68**  **-TG-7 pg32** | **Written exercise** |  |
| **3** | **1** |  | **Controlling water pollution** | **By the end of this topic the learner should be able to explain ways of controlling water pollution on plant** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg61**  **TG - 7 pg 31**  **-PSC-7 PB pg69**  **-TG-7 pg36** | **Oral exercise** |  |
| **2** |  |  | **By the end of this topic the learner should be able to explain ways of controlling water pollution on animals** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg 61**  **TG - 7 pg 32**  **-PSC-7 PB pg62**  **-TG-7 pg38** | **Drawing and labelling** |  |
| **3** |  |  | **By the end of this topic the learner should be able to explain ways of controlling water pollution on soils** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg 62**  **TG - 7 pg 32**  **-PSC-7 PB pg67**  **-TG-7 pg40** | **Written questions** |  |
| **4** |  | **Conserving water** | **By the end of this topic the learner should be able to describe ways of conserving water by harvesting** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg 62**  **TG - 7 pg 32**  **-PSC-7 PB pg67**  **-TG-7 pg32** | **Filling in bank spaces** |  |
| **5** |  |  | **By the end of this topic the learner should be able to describe ways of conserving water by water recycling** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg 67**  **TG - 7 pg 35**  **-PSC-7 PB pg70**  **-TG-7 pg43** | **Written exercise** |  |
| **4** | **1** |  |  | **By the end of this topic the learner should be able to describe ways of conserving water by reusing** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg 80**  **TG - 7 pg**  **-PSC-7 PB pg86**  **-TG-7 pg** | **Oral exercise** |  |
| **2** |  |  | **By the end of this topic the learner should be able to describe ways of conserving water by using water sparingly** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg 82**  **TG - 7 pg 46**  **-PSC-7 PB pg88**  **-TG-7 pg43** | **Drawing and labelling** |  |
| **3** |  |  | **By the end of this topic the learner should be able to describe ways of conserving water by mulching and shading** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Mulches** | **SCIA – 7 pg84**  **TG - 7 pg 43**  **-PSC-7 PB pg90**  **-TG-7 pg46** | **Written questions** |  |
| **4** |  |  | **By the end of this topic the learner should be able to describe ways of conserving water by storing water in dams** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Trip to dam** | **SCIA – 7 pg**  **TG - 7 pg 44**  **-PSC-7 PB pg90**  **-TG-7 pg43** | **Filling in bank spaces** |  |
| **5** |  |  | **By the end of this topic the learner should be able to answer topical question in the topic water** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Charts**  **Pictures**  **Water** | **SCIA – 7 pg 90**  **TG - 7 pg 45**  **-PSC-7 PB pg93**  **-TG-7 pg55** | **Written exercise** |  |
| **5** | **1** | **Soil** | **Soil fertility** | **By the end of this topic the learner should be able to explain the meaning of fertilizers** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Fertilizers** | **SCIA – 7 pg 88**  **TG - 7 pg**  **-PSC-7 PB pg93**  **-TG-7 pg67** | **Oral exercise** |  |
| **2** |  | **Types of fertilizer** | **By the end of this topic the learner should be able to identify straight fertilizers** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Fertilizers** | **SCIA – 7 pg**  **TG - 7 pg 47**  **-PSC-7 PB pg94**  **-TG-7 pg67** | **Drawing and labelling** |  |
| **3** |  |  | **By the end of this topic the learner should be able to identify compound fertilizers** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Charts**  **Pictures**  **Fertilizers** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg95**  **-TG-7 pg67** | **Written questions** |  |
| **4** |  | **Types of manure** | **By the end of this topic the learner should be able to identify green manure** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Charts**  **Pictures**  **Fertilizers**  **Manure** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg95**  **-TG-7 pg67** | **Filling in bank spaces** |  |
| **5** |  |  | **By the end of this topic the learner should be able to identify and explain farmyard manure** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Fertilizers**  **Manure** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg95**  **-TG-7 pg67** |  |  |
| **6** | **1** |  |  | **By the end of this topic the learner should be able to identify and explain how to make compost manure** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Charts**  **Pictures**  **Fertilizers**  **Manure** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg96**  **-TG-7 pg67** | **Oral exercise** |  |
| **2** |  |  | **By the end of this topic the learner should be able to discuss and explain advantages of fertilizer** | * **Discussion** * **Explanation** * **Demonstrating**   **-** | * **Discussion** * **Explanation** * **Demonstrating**   **-** | **Charts**  **Pictures**  **Fertilizers**  **Manure** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg68** | **Drawing and labelling** |  |
| **3** |  |  | **By the end of this topic the learner should be able to discuss and explain disadvantages of fertilizer** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Fertilizers**  **Manure** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg96**  **-TG-7 pg68** | **Written questions** |  |
| **4** |  |  | **By the end of this topic the learner should be able to discuss and explain advantages of manure** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Fertilizers**  **Manure** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg97**  **-TG-7 pg68** | **Filling in bank spaces** |  |
| **5** |  |  | **By the end of this topic the learner should be able to discuss and explain disadvantages of manure** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Charts**  **Pictures**  **Fertilizers**  **Manure** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg97**  **-TG-7 pg68** | **Written exercise** |  |
| **7** | **MID TERM EXAMIATION** | | | | | | | | |  |
| **8** | **1** | **Energy** | **Sources of electricity** | **By the end of this topic the learner should be able to indentify different sources of electricity** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Batteries**  **Cell**  **Dynamo** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg98**  **-TG-7 pg68** | **Oral exercise** |  |
| **2** |  | **Batteries** | **By the end of this topic the learner should be able to identify and explain batteries as source of electricity** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Batteries**  **Cell**  **Dynamo** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg100**  **-TG-7 pg68** | **Drawing and labelling** |  |
| **3** |  | **Simple electric circuit** | **By the end of this topic the learner should be able to make a simple circuit using electricity** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Batteries**  **Cell**  **Dynamo** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg100**  **-TG-7 pg67** | **Written questions** |  |
| **4** |  | **dynamos** | **By the end of this topic the learner should be able to identify and explain dynamos as source of electricity to** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Batteries**  **Cell**  **Dynamo** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg102**  **-TG-7 pg** | **Filling in bank spaces** |  |
| **5** |  | **Hydro electric generators** | **By the end of this topic the learner should be able to identify and explain HEP as source of electricity to** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Visit to HEP station**  **Chart** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg103**  **-TG-7 pg** | **Written exercise** |  |
| **9** | **1** |  | **Petrol driven generator** | **By the end of this topic the learner should be able to identify and explain petrol driven generators as source of electricity to** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Batteries**  **Cell**  **Dynamo**  **Charts**  **Pictures** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg104**  **-TG-7 pg** |  |  |
| **2** |  |  | **By the end of this topic the learner should be able to identify and explain wind driven turbines as source of electricity to** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Dynamo**  **Charts**  **Pictures** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg105**  **-TG-7 pg** |  |  |
| **3** |  |  | **By the end of this topic the learner should be able to identify and explain solar energy(panels) as source of electricity to** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Dynamo**  **Charts**  **Pictures** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg106**  **-TG-7 pg** |  |  |
| **4** |  | **Good and conductors** | **By the end of this topic the learner should be able to investigate good conductors of electricity** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Dynamo**  **Charts**  **Pictures** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** |  |  |
| **5** |  | **Insulators** | **By the end of this topic the learner should be able to investigate bad conductors of electricity** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Batteries**  **Cell**  **Wires**  **Charts** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg107**  **-TG-7 pg** |  |  |
| **10** | **1** |  | **Electric appliance** | **By the end of this topic the learner should be able to identify electrical appliances used at home** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **TV**  **radio**  **Iron box cooker**  **Electric cooker** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg108**  **-TG-7 pg** |  |  |
| **2** |  |  | **By the end of this topic the learner should be able to discuss the use of electrical appliances used at home to** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **TV**  **radio**  **Iron box cooker**  **Electric cooker** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg109**  **-TG-7 pg** |  |  |
| **3** |  | **Safety when dealing with electric appliances** | **By the end of this topic the learner should be able to discuss safety measures when dealing with electricity (not touching the switch with wet hands)** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **TV**  **radio**  **Iron box cooker**  **Electric cooker** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg110**  **-TG-7 pg** |  |  |
| **4** |  |  | **By the end of this topic the learner should be able to discuss safety measures when dealing with electricity (not putting wires, stick pencil )** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Socket**  **Pencil**  **Wires** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg110**  **-TG-7 pg** |  |  |
| **5** |  |  | **By the end of this topic the learner should be able to discuss safety measures when dealing with electricity (not overloading sockets)** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Socket**  **Pencil**  **Wires** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg111-118**  **-TG-7 pg** |  |  |
| **11** | **1** |  | **Lightning and safety measures** | **By the end of this topic the learner should be able to demonstrate fitting lightning arresters as a safety measure** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Pencil**  **Wires**  **Chart** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg119**  **-TG-7 pg** |  |  |
| **2** |  |  | **By the end of this topic the learner should be able to demonstrate avoiding walking in open field when raining as a safety measure** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Chart** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg120**  **-TG-7 pg** |  |  |
| **3** |  |  | **By the end of this topic the learner should be able to demonstrate not sheltering under the trees when raining as a safety measure** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | **Chart** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg121**  **-TG-7 pg67** |  |  |
| **4** |  |  | **By the end of this topic the learner should be able to answer the questions under the topic energy correctly** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Answering** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Answering** | **Chart** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg1222**  **-TG-7 pg67** |  |  |
| **5** |  |  | **By the end of this topic the learner should be able to answer the questions under the topic energy correctly** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Chart** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg123**  **-TG-7 pg** |  |  |
| **12** | **1-5** |  | **Revision** | **By the end of this topic the learner should be able to answer the questions under the topic energy correctly** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Chart** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** |  |  |
| **13** | **REVISION** | | | | | | | |  |  |
| **14 END OF TERM TWO EXAMINATIONS** | | | | | | | | | | |