**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** |