**SCIENCE SCHEMES OF WORK**

**STANDARD SEVEN**

**TERM III**

**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 PUBLISHERS

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WEEK** | **LESSON** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **TEACHER’S ACTIVITIES** | **LEARNER’S ACTIVITIES** | **RESOURCES/** | **REFERENCES** | **ASSESSMENT** | **REMARKS** |
| **1** | **REPORTING AND PREPARATION** | | | | | | | | |  |
| **2** | **1** | **Properties of matter** | **Dissolving solids in water** | **By the end of this topic the learner should be able to identify solids that do not dissolve in water.** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Water , nail, coin, chalk wood, plastic** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Oral exercise** |  |
| **2** |  |  | **By the end of this topic the learner should be able to identify solids that dissolve in water.** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Oil**  **Fat**  **Milk**  **Water**  **Paraffin** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Drawing and labelling** |  |
| **3** |  | **Mixing liquids** | **By the end of this topic the learner should be able to identify miscible liquids** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Oil**  **Fat**  **Milk**  **Water**  **Paraffin** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written questions** |  |
| **4** |  | **Immiscible** | **By the end of this topic the learner should be able to identify liquids that do not mix** | * **Discussion** * **Explanation** * **Demonstrating diagrams** * **observation** | * **Discussion** * **Explanation** * **Demonstrating diagrams** * **observation** | **Oil**  **Fat**  **Milk**  **Water**  **Paraffin** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Filling in bank spaces** |  |
| **5** |  | **Magnetic** | **By the end of this topic the learner should be able to identify magnetic materials** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | **Magnet**  **Copper**  **Tin**  **Iron** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written exercise** |  |
| **3** | **1** |  |  | **By the end of this topic the learner should be able to investigate non magnetic materials** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Aluminium**  **Iron**  **Wood**  **Plastic** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Oral exercise** |  |
| **2** |  | **Separating mixtures**  **Sieve** | **By the end of this topic the learner should be able to separate mixtures by sieving** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Sieve** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Drawing and labelling** |  |
| **3** |  | **picking** | **By the end of this topic the learner should be able to separate mixtures by picking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Pebbles**  **Grain**  **Maize**  **sand** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written questions** |  |
| **4** |  | **Filtering** | **By the end of this topic the learner should be able to separate mixtures by filtering** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Filter paper**  **Charcoal filter**  **Dirty water**  **cotton** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Filling in bank spaces** |  |
| **5** |  | **Decanting** | **By the end of this topic the learner should be able to separate mixtures by decanting** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Dirty water** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written exercise** |  |
| **4** | **1** |  | **Use of magnet** | **By the end of this topic the learner should be able to separate mixtures by use of magnet** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Magnet** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Oral exercise** |  |
| **2** |  | **Evaporation** | **By the end of this topic the learner should be able to separate mixtures by evaporation** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Source of fire**  **Salt**  **Sugar**  **Water** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Drawing and labelling** |  |
| **3** |  |  | **By the end of this topic the learner should be able to separate mixtures by sieving** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Sieve** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written questions** |  |
| **4** |  |  | **By the end of this topic the learner should be able to revise and answer question in the topic properties of mater** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Revision paper**  **Books** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Filling in bank spaces** |  |
| **5** |  |  | **By the end of this topic the learner should be able to revise and answer question in the topic properties of mater** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Revision paper**  **Books** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written exercise** |  |
| **5** | **1** |  | **Revision** | **By the end of this topic the learner should be able to revise and answer question in the mid term examination** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Revision paper**  **Books** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Oral exercise** |  |
| **2** |  |  | **By the end of this topic the learner should be able to revise and answer question in the mid term examination** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Revision paper**  **Books** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Drawing and labelling** |  |
| **3** |  |  | **By the end of this topic the learner should be able to revise and answer question in the mid term examination** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Revision paper**  **Books** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written questions** |  |
| **4** |  |  | **By the end of this topic the learner should be able to revise and answer question in the mid term examination** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Revision paper**  **Books** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Filling in bank spaces** |  |
| **5** |  |  |  | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** |  | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written exercise** |  |
| **6** | **MID TERM EXAMINATION** | | | | | | | | |  |
| **7** | **1** | **Making work easier** | **Friction** | **By the end of this topic the learner should be able to explain the meaning of friction** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Ball bearing**  **Oil**  **Grease**  **Glossy surface**  **Rough surface**  **Treads** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Oral exercise** |  |
| **2** |  |  | **By the end of this topic the learner should be able to investigate friction** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Ball bearing**  **Oil**  **Grease**  **Glossy surface**  **Rough surface**  **Treads** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Drawing and labelling** |  |
| **3** |  | **Advantages of friction** | **By the end of this topic the learner should be able to state the advantages of friction** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Ball bearing**  **Oil**  **Grease**  **Glossy surface**  **Rough surface**  **Treads** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written questions** |  |
| **4** |  | **Disadvantages** | **By the end of this topic the learner should be able to state the disadvantages of friction** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Ball bearing**  **Oil**  **Grease**  **Glossy surface**  **Rough surface**  **Treads** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Filling in bank spaces** |  |
| **5** |  | **Increasing friction** | **By the end of this topic the learner should be able to demonstrate how to increase friction** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Ball bearing**  **Oil**  **Grease**  **Glossy surface**  **Rough surface**  **Treads** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written exercise** |  |
| **8** | **1** |  | **Reducing friction** | **By the end of this topic the learner should be able to demonstrate ways of reducing friction** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Ball bearing**  **Oil**  **Grease**  **Glossy surface**  **Rough surface**  **Treads** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Oral exercise** |  |
| **2** | **Parts of a lever** | **Lever**  **Claw hammer** | **By the end of this topic the learner should be able to identify the position of fulcrum when claw hammer is in use** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Claw hammer**  **Wood**  **Nail** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Drawing and labelling** |  |
| **3** |  |  | **By the end of this topic the learner should be able to identify the position of load when claw hammer is in use** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Claw hammer**  **Wood**  **Nail** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written questions** |  |
| **4** |  |  | **By the end of this topic the learner should be able to identify the position of effort when claw hammer is in use** | * **Discussion** * **Explanation** * **Demonstrating** | * **Discussion** * **Explanation** * **Demonstrating** | **Claw hammer**  **Wood**  **Nail** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Filling in bank spaces** |  |
| **5** |  | **Crowbar** | **By the end of this topic the learner should be able to identify the position of fulcrum when crowbar is in use** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **Crowbar**  **stone** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Written exercise** |  |
| **9** | **1** |  |  | **By the end of this topic the learner should be able to identify the position of load when crowbar is in use** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | **Crowbar**  **stone** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Oral exercise** |  |
| **2** |  |  | **By the end of this topic the learner should be able to identify the position of effort when crowbar is in use** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | * **Discussion** * **Explanation** * **Demonstrating diagrams** | **Crowbar**  **stone** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg**  **-TG-7 pg** | **Drawing and labelling** |  |
| **3** |  | **Wheelbarrow** | **By the end of this topic the learner should be able to identify the position of fulcrum when wheelbarrow is in use** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **A wheel barrow**  **Load**  **sand** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg117**  **-TG-7 pg** | **Written questions** |  |
| **4** |  |  | **By the end of this topic the learner should be able to identify the position of load when wheelbarrow is in use** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **A wheel barrow**  **A load** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg118**  **-TG-7 pg** | **Filling in bank spaces** |  |
| **5** |  |  | **By the end of this topic the learner should be able to identify the position of effort when wheelbarrow is in use** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | **A wheel barrow** | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg119**  **-TG-7 pg67** | **Written exercise** |  |
| **10** | **1-5** |  |  | **By the end of this topic the learner should be able to revise and answer question in the term examination** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** | * **Discussion** * **Explanation** * **Demonstrating diagrams**   **Note taking** |  | **SCIA – 7 pg**  **TG - 7 pg**  **-PSC-7 PB pg120**  **-TG-7 pg67** |  |  |
| **11** |  | **REVISION EXAMINATION, CLOSING THE SCHOOL** | | | | | | | |  |