**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** |  |