SCIENCE AND TECHNOLOGY ACTIVITIES GRADE 4

SCHEMES OF WORK

TERM YEAR SCHOOL

|  |  |  |  |  |  |  |  |  |  |
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| **WK** | **LSN** | **STRAND** | **SUB-STRAND** | **SPECIFIC LEARNING OUTCOMES** | **KEY INQUIRY QUESTION** | **LEARNING EXPERIENCES** | **LEARNING RESOURCES** | **ASSESMENT METHODS** | **REFL** |
| **1** | **OPENING /PREPARATIONS** |
|  |  |  |  |  |  |  |  |  |  |
| 2 | 1 | **FORCE AND ENERGY** | Makinga fireless cooker | By the end of the sub strand the learner should be able to: 1. Make fireless cookers from locally available materials
2. Observe safety when handling materials
3. Appreciate heat energy in daily life
 | 1. How does heat move from one point to another in solids?  | **Project 2**: Learners to make a fireless cooker  | Source of heat, water, spoon, cooking stick, maize cobScience and technology Grade 4 Learners Bk. Pg. 92 | Group discussionsQuestion and answerdemosntration |  |
|  | 2 |  | Makinga fireless cooker | By the end of the sub strand the learner should be able to: 1. Make fireless cookers from locally available materials
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|  | 3 |  | Makinga fireless cooker | By the end of the sub strand the learner should be able to: 1. Make fireless cookers from locally available materials
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|  | 4 |  | Machines – levers as machines | By the end of the sub strand the learner should be able to: 1. Identify the lever as a machine used in everyday life.
2. Appreciate levers in daily life situations
 | 1. How are leversuseful in oureveryday life? | a) Learners are guided to demonstrate levers as simplemachinesb) Learners are guided to use visual aids and digitaldevices to demonstrate levers as simple machines | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of woodScience and technology Grade 4 Learners Bk. Pg. 96 | Group discussionsQuestion and answerdemosntration |  |
| 3 | 1 |  | Levers used in our locality | By the end of the sub strand the learner should be able to: 1. Identify levers used in the locality.
2. Appreciate levers in daily life situations
 | 1. How are leversuseful in oureveryday life? | c) Learners are guided to identify different levers used in the localityd) Learners use digital devices to observe and recorddifferent levers (For example: see saw, beam balance,wheel barrow, spade, spoon, fishing rod and scissors). | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of woodScience and technology Grade 4 Learners Bk. Pg. 97 | Group discussionsQuestion and answerdemosntration |  |
|  | 2 |  | Parts of a lever | By the end of the sub strand the learner should be able to: 1. Identify parts of a lever.
2. Appreciate levers in daily life situations
 | 1. How are leversuseful in oureveryday life? | e) In groups, learners are guided to identify and recordparts of a lever.f) Learners use digital devices to observe and identifyparts of a lever | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of woodScience and technology Grade 4 Learners Bk. Pg. 98 | Group discussionsQuestion and answerdemosntration |  |
|  | 3 |  | Making a see-saw | By the end of the sub strand the learner should be able to: 1. Make a see saw
2. Show curiosity to use levers to make work easier
 | 1. How are leversuseful in oureveryday life? | g) In groups, learner are guided to make and use a see saw | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of woodScience and technology Grade 4 Learners Bk. Pg. 99 | Group discussionsQuestion and answerdemosntration |  |
|  | 4 |  | Using levers to make work easier | By the end of the sub strand the learner should be able to: 1. Appreciate levers in daily life situations
2. Show curiosity to use levers to make work easier
 | 1. How are leversuseful in oureveryday life? | g) In groups, learner are guided to make and use a see saw | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of woodScience and technology Grade 4 Learners Bk. Pg. 100 | Group discussionsQuestion and answerdemosntration |  |
| 4 | 1 |  | Making a beam balance using locally available materials | By the end of the sub strand the learner should be able to: 1. Make a functional beam balance using the locallyavailable materials
2. Appreciate levers in daily life situations
 | 1. How are leversuseful in oureveryday life? | Project: In groups, learners are guided to make and use afunctional beam balance using locally available materials | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of woodScience and technology Grade 4 Learners Bk. Pg. 101 | Group discussionsQuestion and answerdemosntration |  |
|  | 2 |  | Making a beam balance using locally available materials | By the end of the sub strand the learner should be able to: 1. Make a functional beam balance using the locallyavailable materials
2. Appreciate levers in daily life situations
 | 1. How are leversuseful in oureveryday life? | Project: In groups, learners are guided to make and use afunctional beam balance using locally available materials | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of woodScience and technology Grade 4 Learners Bk. Pg. 101 | Group discussionsQuestion and answerdemosntration |  |
|  | 3 |  | Making a beam balance using locally available materials | By the end of the sub strand the learner should be able to: 1. Make a functional beam balance using the locallyavailable materials
2. Appreciate levers in daily life situations
 | 1. How are leversuseful in oureveryday life? | Project: In groups, learners are guided to make and use afunctional beam balance using locally available materials | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of woodScience and technology Grade 4 Learners Bk. Pg. 101 | Group discussionsQuestion and answerdemosntration |  |
|  | 4 | **EARTH AND SPACE** | Weather and the sky – bodies in the sky during day and night | By the end of the sub strand,the learner should be able to:1. Identify bodies observed in the sky during day and night
2. Appreciate theimportance of weatherconditions within thelocality
 | 1. What can beobserved in thesky during theday?2. Which are theactivities done inthe locality duringwet and dryweatherconditions? | a) Observe and record features of the sky at day timeand during the night.b | Weather clock, weather chart,textbooks, internet, and digitaldevices.Science and technology Grade 4 Learners Bk. Pg. 104 | Group discussionsQuestion and answerdemosntration |  |
| 5 | 1 |  | Types of cloud in the sky during the day | By the end of the sub strand,the learner should be able to:1. Record types of clouds inthe sky during the day.
2. Appreciate theimportance of weatherconditions within thelocality
 | 1. What can beobserved in thesky during theday?2. Which are theactivities done inthe locality duringwet and dryweatherconditions? | ) Learners are guided to observe the sky and recordtypes of clouds (Cumulus, Nimbus Cirrus, andStratus).c) Learners to use visual aids and digital devices toobserve and identify different types of clouds. | Weather clock, weather chart,textbooks, internet, and digitaldevices.Science and technology Grade 4 Learners Bk. Pg. 105 | Group discussionsQuestion and answerdemosntration |  |
|  | 2 |  | Activities done during different weather conditions | By the end of the sub strand,the learner should be able to:1. Identify activities doneduring different weatherconditions
2. Appreciate theimportance of weatherconditions within thelocality
 | 1. What can beobserved in thesky during theday?2. Which are theactivities done inthe locality duringwet and dryweatherconditions? | d) Learners are guided to compare activities carriedout during different weather conditions (drying,winnowing, flying kites, growing crops, harvestingcrops)e) Learners use digital devices to observe andcompare activities carried out during differentweather conditions.. | Weather clock, weather chart,textbooks, internet, and digitaldevices.Science and technology Grade 4 Learners Bk. Pg. 107 | Group discussionsQuestion and answerdemosntration |  |
|  | 3 |  | Importance of weather conditions within the locality | By the end of the sub strand,the learner should be able to:1. Appreciate theimportance of weatherconditions within thelocality.
2. Identify the importance of weather conditions within the locality
 | 1. What can beobserved in thesky during theday?2. Which are theactivities done inthe locality duringwet and dryweatherconditions? | d) Learners are guided to compare activities carriedout during different weather conditions (drying,winnowing, flying kites, growing crops, harvestingcrops)e) Learners use digital devices to observe andcompare activities carried out during differentweather conditions.. | Weather clock, weather chart,textbooks, internet, and digitaldevices.Science and technology Grade 4 Learners Bk. Pg. 107 | Group discussionsQuestion and answerdemosntration |  |
|  | 4 |  | Making a weather clock | By the end of the sub strand,the learner should be able to:1. Make a weather clock.
2. Observe safety while using available materials
3. Appreciate theimportance of weatherconditions within thelocality.
 | 1. What can beobserved in thesky during theday?2. Which are theactivities done inthe locality duringwet and dryweatherconditions? | Project 1: In groups, learners are guided to makeweather clock to record changes of weather | Weather clock, weather chart,textbooks, internet, and digitaldevices.Science and technology Grade 4 Learners Bk. Pg. 109 | Group discussionsQuestion and answerdemosntration |  |
| 6 | 1 |  | Making a weather clock | By the end of the sub strand,the learner should be able to:1. Make a weather clock.
2. Observe safety while using available materials
3. Appreciate theimportance of weatherconditions within thelocality.
 | 1. What can beobserved in thesky during theday?2. Which are theactivities done inthe locality duringwet and dryweatherconditions? | Project 1: In groups, learners are guided to makeweather clock to record changes of weather | Weather clock, weather chart,textbooks, internet, and digitaldevices.Science and technology Grade 4 Learners Bk. Pg. 109 | Group discussionsQuestion and answerdemosntration |  |
|  | 2 |  | Weather chart | By the end of the sub strand,the learner should be able to:1. Make a weather chart
2. Observe safety while using available materials
3. Appreciate theimportance of weatherconditions within thelocality.
 | 1. What can beobserved in thesky during theday?2. Which are theactivities done inthe locality duringwet and dryweatherconditions? | Project 2: Learners are guided to develop a weatherchart for recording changes of weather on a daily basis | Weather clock, weather chart,textbooks, internet, and digitaldevices.Science and technology Grade 4 Learners Bk. Pg. 107 | Group discussionsQuestion and answerdemosntration |  |
|  | 3 |  | Weather chart | By the end of the sub strand,the learner should be able to:1. Make a weather chart
2. Observe safety while using available materials
3. Appreciate theimportance of weatherconditions within thelocality.
 | 1. What can beobserved in thesky during theday?2. Which are theactivities done inthe locality duringwet and dryweatherconditions? | Project 2: Learners are guided to develop a weatherchart for recording changes of weather on a daily basis | Weather clock, weather chart,textbooks, internet, and digitaldevices.Science and technology Grade 4 Learners Bk. Pg. 111 | Group discussionsQuestion and answerdemosntration |  |
| 7-8 | **ASSESMENT/CLOSING** |