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** | | | | | | | | |
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| 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 cob  Science and technology Grade 4 Learners Bk. Pg. 92 | Group discussions  Question and answer  demosntration |  |
|  | 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 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 cob  Science and technology Grade 4 Learners Bk. Pg. 92 | Group discussions  Question and answer  demosntration |  |
|  | 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 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 cob  Science and technology Grade 4 Learners Bk. Pg. 92 | Group discussions  Question and answer  demosntration |  |
|  | 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 levers useful in our everyday life? | a) Learners are guided to demonstrate levers as simple machines b) Learners are guided to use visual aids and digital devices to demonstrate levers as simple machines | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of wood  Science and technology Grade 4 Learners Bk. Pg. 96 | Group discussions  Question and answer  demosntration |  |
| 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 levers useful in our everyday life? | c) Learners are guided to identify different levers used in the locality d) Learners use digital devices to observe and record different 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 wood  Science and technology Grade 4 Learners Bk. Pg. 97 | Group discussions  Question and answer  demosntration |  |
|  | 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 levers useful in our everyday life? | e) In groups, learners are guided to identify and record parts of a lever. f) Learners use digital devices to observe and identify parts of a lever | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of wood  Science and technology Grade 4 Learners Bk. Pg. 98 | Group discussions  Question and answer  demosntration |  |
|  | 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 levers useful in our everyday 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 wood  Science and technology Grade 4 Learners Bk. Pg. 99 | Group discussions  Question and answer  demosntration |  |
|  | 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 levers useful in our everyday 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 wood  Science and technology Grade 4 Learners Bk. Pg. 100 | Group discussions  Question and answer  demosntration |  |
| 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 locally available materials 2. Appreciate levers in daily life situations | 1. How are levers useful in our everyday life? | Project: In groups, learners are guided to make and use a functional beam balance using locally available materials | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of wood  Science and technology Grade 4 Learners Bk. Pg. 101 | Group discussions  Question and answer  demosntration |  |
|  | 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 locally available materials 2. Appreciate levers in daily life situations | 1. How are levers useful in our everyday life? | Project: In groups, learners are guided to make and use a functional beam balance using locally available materials | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of wood  Science and technology Grade 4 Learners Bk. Pg. 101 | Group discussions  Question and answer  demosntration |  |
|  | 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 locally available materials 2. Appreciate levers in daily life situations | 1. How are levers useful in our everyday life? | Project: In groups, learners are guided to make and use a functional beam balance using locally available materials | Text book, 30-centimetre ruler, round pencil. Pictures, coins, plank of wood  Science and technology Grade 4 Learners Bk. Pg. 101 | Group discussions  Question and answer  demosntration |  |
|  | 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 the importance of weather conditions within the locality | 1. What can be observed in the sky during the day? 2. Which are the activities done in the locality during wet and dry weather conditions? | a) Observe and record features of the sky at day time and during the night. b | Weather clock, weather chart, textbooks, internet, and digital devices.  Science and technology Grade 4 Learners Bk. Pg. 104 | Group discussions  Question and answer  demosntration |  |
| 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 in the sky during the day. 2. Appreciate the importance of weather conditions within the locality | 1. What can be observed in the sky during the day? 2. Which are the activities done in the locality during wet and dry weather conditions? | ) Learners are guided to observe the sky and record types of clouds (Cumulus, Nimbus Cirrus, and Stratus). c) Learners to use visual aids and digital devices to observe and identify different types of clouds. | Weather clock, weather chart, textbooks, internet, and digital devices.  Science and technology Grade 4 Learners Bk. Pg. 105 | Group discussions  Question and answer  demosntration |  |
|  | 2 |  | Activities done during different weather conditions | By the end of the sub strand, the learner should be able to:   1. Identify activities done during different weather conditions 2. Appreciate the importance of weather conditions within the locality | 1. What can be observed in the sky during the day? 2. Which are the activities done in the locality during wet and dry weather conditions? | d) Learners are guided to compare activities carried out during different weather conditions (drying, winnowing, flying kites, growing crops, harvesting crops) e) Learners use digital devices to observe and compare activities carried out during different weather conditions.. | Weather clock, weather chart, textbooks, internet, and digital devices.  Science and technology Grade 4 Learners Bk. Pg. 107 | Group discussions  Question and answer  demosntration |  |
|  | 3 |  | Importance of weather conditions within the locality | By the end of the sub strand, the learner should be able to:   1. Appreciate the importance of weather conditions within the locality. 2. Identify the importance of weather conditions within the locality | 1. What can be observed in the sky during the day? 2. Which are the activities done in the locality during wet and dry weather conditions? | d) Learners are guided to compare activities carried out during different weather conditions (drying, winnowing, flying kites, growing crops, harvesting crops) e) Learners use digital devices to observe and compare activities carried out during different weather conditions.. | Weather clock, weather chart, textbooks, internet, and digital devices.  Science and technology Grade 4 Learners Bk. Pg. 107 | Group discussions  Question and answer  demosntration |  |
|  | 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 the importance of weather conditions within the locality. | 1. What can be observed in the sky during the day? 2. Which are the activities done in the locality during wet and dry weather conditions? | Project 1: In groups, learners are guided to make weather clock to record changes of weather | Weather clock, weather chart, textbooks, internet, and digital devices.  Science and technology Grade 4 Learners Bk. Pg. 109 | Group discussions  Question and answer  demosntration |  |
| 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 the importance of weather conditions within the locality. | 1. What can be observed in the sky during the day? 2. Which are the activities done in the locality during wet and dry weather conditions? | Project 1: In groups, learners are guided to make weather clock to record changes of weather | Weather clock, weather chart, textbooks, internet, and digital devices.  Science and technology Grade 4 Learners Bk. Pg. 109 | Group discussions  Question and answer  demosntration |  |
|  | 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 the importance of weather conditions within the locality. | 1. What can be observed in the sky during the day? 2. Which are the activities done in the locality during wet and dry weather conditions? | Project 2: Learners are guided to develop a weather chart for recording changes of weather on a daily basis | Weather clock, weather chart, textbooks, internet, and digital devices.  Science and technology Grade 4 Learners Bk. Pg. 107 | Group discussions  Question and answer  demosntration |  |
|  | 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 the importance of weather conditions within the locality. | 1. What can be observed in the sky during the day? 2. Which are the activities done in the locality during wet and dry weather conditions? | Project 2: Learners are guided to develop a weather chart for recording changes of weather on a daily basis | Weather clock, weather chart, textbooks, internet, and digital devices.  Science and technology Grade 4 Learners Bk. Pg. 111 | Group discussions  Question and answer  demosntration |  |
| 7-8 | **ASSESMENT/CLOSING** | | | | | | | | |