**Year 6 (Phase 2/ Upper Key Stage 2)**

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| **Week** | **Model of Learning** | **Topic** | **Curriculum Standard** | **Learning outcomes** | **Prior Learning** | **Cross curricular links** | **Resources** | **Home learning/ Homework** | **Assessment Platform/ Apps for**  **AFL** | | **Key vocabulary** | | **Ongoing reflection/**  **Modification** |
| **JANUARY** | | | | | | | | | | | | | |
| **Week 16**  **(03/01/2021-07/01/2021)** | Blended | **Follow up of all winter break homework. Submission of work and discussion of common mistakes. Follow up of Century tech assignments.**  **Introduction to GL PTS syllabus (all specification points review).**  [**https://elspvtdubai-my.sharepoint.com/:b:/p/sausan/EVKzGkXFSw1GpM8jwWfmSGkB6o5BPSRd323dVqldRODe2Q?e=sAaD8z**](https://elspvtdubai-my.sharepoint.com/:b:/p/sausan/EVKzGkXFSw1GpM8jwWfmSGkB6o5BPSRd323dVqldRODe2Q?e=sAaD8z)  **(The link provides access to the PTS digital administration document. Discuss page 2 with the students)** | | | | | | | | | | | |
| Blended | **All revision for MYA to be completed in this week** | | | | | | | | | | | |
| **Week 17**  **(10/01/2021-14/01/2021)** | Blended | **Forces and motion**  **4.1. Mass and weight**  (Number of lessons required approx. 2) | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.    Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | Distinguish between mass measured in kilograms (kg) and weight measured in newtons, noting that kilograms are used in everyday life.  Recognise and use units of force, mass and weight and identify the direction in which forces act.  Make a variety of relevant observations and measurements using simple apparatus correctly.  Use tables, bar charts and line graphs to present results.  Make comparisons.  Identify patterns in results and results that do not appear to fit the pattern.  Consider how scientists have combined evidence from observation and measurement with creative thinking to suggest new ideas and explanations for phenomena. | Year 5 (Forces) | English, ICT | Refer to teaching ideas in Unit 4 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 4.1, Question 1  **Resources in Activity Book:** Exercise 4.1.  **Resources in Teacher’s resource:**  Worksheet 4.1.  **Practical Activities:** Activity 4.1. from Teaching ideas 4.1. | Exercise 4.1 in the Activity Book would make a suitable homework task. | Can learners explain the following:  What gravity is  what the difference is between mass and weight  how weight is related to the force of gravity  how distance between objects and the earth affects the force of gravity?  Can learners do the following:  measure force with a forcemeter  identify the numerical relationship of the weight of an object in newtons being ten times bigger than the mass of an object in kilograms? | | Force  Gravity  Kilogram  Mass | |  |
| Blended | **Forces and motion**  **4.2. How forces act.**  (Number of lessons required approx. 1) | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.    Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | Recognise and use units of force, mass and weight and identify the direction in which forces act.  Make a variety of relevant observations and measurements using simple apparatus correctly. | Year 5 (Forces) | English, ICT, Maths | Refer to teaching ideas in Unit 4 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 4.2, Question 1, 2.  **Resources in Activity Book:** Exercise 4.2.  **Practical Activities:** Activity 4.2. from Teaching ideas 4.2. | Exercise 4.2 in the Activity Book would make a suitable homework task. | Discuss answers to Exercise 4.2 in the Activity Book in class and let learners check their own work for self-assessment purposes. | | Exert  Force diagram | |  |
| **Week 18**  **(17/01/2021-21/01/2021)** | **Mid Year Assessment** | | | | | | | | | | | | |
| **Week 19**  **(24/01/2021-28/01/2021)** | **Mid Year Assessment** | | | | | | | | | | | | |
| **JANUARY/ FEBRUARY** | | | | | | | | | | | | | |
| **Week 20**  **(31/01/2021-04/02/2021)** | Blended | **Forces and motion**  **4.3. Balanced and unbalanced forces.**  (Number of lessons required approx. 2) | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.    Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | Recognise and use units of force, mass and weight and identify the direction in which forces act.  Make a variety of relevant observations and measurements using simple apparatus correctly. | Year 5 (Forces) | English, ICT, Maths | Refer to teaching ideas in Unit 4 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 4.3, Question 1, 2.  **Resources in Activity Book:** Exercise 4.3.  **Resources in Teacher’s resource:**  Worksheet 4.3.  **Practical Activities:** Activity 4.3. from Teaching ideas 4.3. | Worksheet 4.3 would make a suitable homework task. | Discuss answers to Worksheet 4.3 in class and let learners check one another’s work for peer assessment purposes. | | Balanced (Forces)  Net (Force)  Unbalanced (Forces) | |  |
| Blended | **Forces and motion**  **4.4. The effects of forces.**  (Number of lessons required approx. 2) | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.    Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | Recognise and use units of force, mass and weight and identify the direction in which forces act.  Make a variety of relevant observations and measurements using simple apparatus correctly.  Understand the notion of energy in movement.  Use tables, bar charts and line graphs to present results. | Year 5 (Forces) | English, ICT, Maths | Refer to teaching ideas in Unit 4 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 4.4, Question 1, 2.  **Resources in Activity Book:** Exercise 4.4.  **Resources in Teacher’s resource:**  Worksheet 4.4.  **Practical Activities:** Activity 4.4. from Teaching ideas 4.4. | Questions 1 and 2 in the Learner’s Book can be set as a homework task. | You can use this rubric to assess Activity 4.4   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Criteria** | **3 marks** | **2 marks** | **1 mark** | **0 marks** | | **organisation and following instructions** | instructions correctly followed; well organised | most instructions correctly followed; organised | few instructions followed correctly; disorganised | instructions not followed | | **use of allocated time** | completed well within time; able to give assistance to others | completed well within time; no assistance needed | completed within time; some assistance needed | not completed in time | | **use of equipment/ apparatus and  materials** | equipment and materials used correctly and with care; tidied away | most equipment and materials used correctly | some equipment and materials used correctly | equipment and materials used incorrectly/ carelessly | | **results** | all results accurate; well-recorded in detail | most results accurate; recorded | some accurate results; incompletely recorded | results not obtained; not recorded | | **interpretation and answers** | all answers accurate; made meaningful interpretations of results | most answers accurate; made some meaningful interpretations of results | few answers accurate; made few meaningful interpretations of results | no answers accurate; made no meaningful interpretations of results | | | | | |
| **Week 21**  **(07/02/2021-11/02/2021)** | Blended | **Forces and motion**  **4.5. Forces and energy**  (Number of lessons required approx. 1) | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.    Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | Understand the notion of energy in movement. | Year 5 (Forces) | English, ICT, Maths | Refer to teaching ideas in Unit 4 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 4.5, Question 1-3 Challenge questions.  **Resources in Activity Book:** Exercise 4.5.  **Practical Activities:** Activity 4.5. from Teaching ideas 4.5. | Exercise 4.5 in the Activity Book can be set as a homework task. | Discuss answers to Exercise 4.5 in the Activity Book in class and let learners check their own work for self-assessment. | | Energy  Work | |  |
| Blended | **Forces and motion**  **4.6. Friction**  (Number of lessons required approx. 2) | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.    Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | Recognise friction (including air resistance) as a force which can affect the speed at which objects move and which sometimes stops things moving.  Make a variety of relevant observations and measurements using simple apparatus correctly.  Use tables, bar charts and line graphs to present results.  Identify patterns in results and results that do not appear to fit the pattern.  Use results to draw conclusions and to make further predictions.  Suggest and evaluate explanations for predictions using scientific knowledge and understanding and communicate these clearly to others. | Year 5 (Forces) | English, ICT, Maths | Refer to teaching ideas in Unit 4 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 4.6, Question 1-4 Challenge questions.  **Resources in Activity Book:** Exercise 4.6.  **Resources in Teacher’s resource:**  Worksheet 4.6.  **Practical Activities:** Activity 4.6. from Teaching ideas 4.6. | Exercise 4.6 in the Activity Book would make a suitable homework task. | Can learners:  explain what friction is give examples of useful friction  give examples of friction as a problem suggest ways to reduce friction between surfaces measure frictional forces with a forcemeter? | | Friction  Lubricate | |  |
| **Week 22**  **(14/02/2021-18/02/2021)** | Blended | **Forces and motion**  **4.7. Investigating friction**  (Number of lessons required approx. 2) | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.    Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | Recognise friction (including air resistance) as a force which can affect the speed at which objects move and which sometimes stops things moving.  Use tables, bar charts and line graphs to present results.  Make comparisons.  Identify factors that are relevant to a particular situation.  Make predictions using scientific knowledge and understanding.  Collect evidence and data to test ideas including predictions.  Say if and how evidence supports any prediction made.  Suggest and evaluate explanations for predictions using scientific knowledge and understanding and communicate these clearly to others.  Decide when observations and measurements need to be checked by repeating to give more reliable data. | Year 5 (Forces) | English, ICT, Maths | Refer to teaching ideas in Unit 4 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 4.7, Question 1-6  **Resources in Activity Book:** Exercise 4.7.  **Resources in Teacher’s resource:**  Worksheet 4.7.  **Practical Activities:** Activity 4.7. from Teaching ideas 4.7. | Exercise 4.7 in the Activity Book would make a suitable homework task. | |  |  | | --- | --- | | **Description** | **Marks** | | Learners were highly engaged in class discussions; were highly focused and worked well in their groups during Activity 4.7; followed directions well and successfully completed the investigation; and were able to demonstrate a solid understanding of the effects of type of surface and surface area on friction. | 3 | | Learners were somewhat engaged in class discussions; were somewhat focused and participated adequately in their groups during Activity 4.7;  followed directions for the most part and successfully completed the investigation with little outside assistance; and were able to demonstrate a basic understanding of the effects of type of surface and surface area on friction. | 2 | | Learners participated minimally in class discussions; were unfocused and did not participate in their group investigation; were unable to follow directions without outside assistance; and were unable to demonstrate a basic understanding of the effects of type of surface and surface area on friction. | 1 |   Learners can use the peer assessment checklist at the end of Worksheet 4.7 to assess one another’s work.  Use the following rubric to evaluate learners’ work during the lesson and Activity 4.7. | | | | |
| Blended | **Forces and motion**  **4.8. Air resistance and drag**  (Number of lessons required approx. 2) | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.    Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | Recognise friction (including air resistance) as a force which can affect the speed at which objects move and which sometimes stops things moving.  Use tables, bar charts and line graphs to present results.  Evaluate repeated results.  Make a variety of relevant observations and measurements using simple apparatus correctly.  Make comparisons.  Identify factors that are relevant to a particular situation.  Make predictions using scientific knowledge and understanding.  Collect evidence and data to test ideas including predictions.  Say if and how evidence supports any prediction made.  Choose what evidence to collect to investigate a question, ensuring that the evidence is sufficient.  Choose which equipment to use.  Discuss how to turn ideas into a form that can be tested. | Year 5 (Forces) | English, ICT, Maths | Refer to teaching ideas in Unit 4 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 4.8, Question 1-3  **Resources in Activity Book:** Exercise 4.8.  **Resources in Teacher’s resource:**  Worksheet 4.8.  **Practical Activities:** Activity 4.8. from Teaching ideas 4.8. | Exercise 4.8 in the Activity Book is a suitable homework task. | Learners can use the peer assessment checklist at the end of Worksheet 4.8 to assess one another’s work. | Air resistance  Drag  Surface area | |  | |
| **Half Term Break for Students (21/02/2021-23/02/2021)** | | | | | | | | | | | | | |
| **Week 23**  **(24/02/2021-25/02/2021)** | Blended | **Forces and motion** | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.    Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | **Unit Test 4+Research activity from Wonderopolis**  <https://wonderopolis.org/wonders?category=&subcategory=&order_by=&q=forces>  **Provide practice questions from GL PTS reports**  [Year 7](onenote:https://elspvtdubai.sharepoint.com/sites/ELSScience/SiteAssets/ELS%20Science%20Notebook/GL%20Progress%20Test%20Group%20Reports%20for%20Teachers.one#Year%207&section-id={57CF1F95-3A76-45BD-97AC-E5B990181957}&page-id={4880FB55-8E3A-406A-8406-EE7334B47329}&end)  ([Web view](https://elspvtdubai.sharepoint.com/sites/ELSScience/_layouts/OneNote.aspx?id=%2Fsites%2FELSScience%2FSiteAssets%2FELS%20Science%20Notebook&wd=target%28GL%20Progress%20Test%20Group%20Reports%20for%20Teachers.one%7C57CF1F95-3A76-45BD-97AC-E5B990181957%2FYear%207%7C4880FB55-8E3A-406A-8406-EE7334B47329%2F%29)) | | | | | | | | | |
| Blended | **Electrical conductors and insulators**  **5.1. Which materials conduct electricity?**  (Number of lessons required approx. 1) | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.    Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.    Use recognised symbols when representing a simple circuit in a diagram. | Investigate how some materials are better conductors of electricity than others.  Decide when observations and measurements need to be checked by repeating to give more reliable data.  Use a table, bar chart or line graph to present results.  Identify patterns in results and results that do not seem to fit the pattern.  Use results to draw conclusions and make further predictions.  Say whether and how the evidence supports any prediction made. | Year 4 (Electricity) | English, ICT, Maths | Refer to teaching ideas in Unit 5 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 5.1, Question 1, 2, 3, 4.  **Resources in Activity Book:** Exercise 5.1.  **Resources in Teacher’s resource:**  Worksheet 5.1a, 5.1b, 5.1c.  **Practical Activities:** Activity 5.1. from Teaching ideas 5.1. | Exercise 5.1 in the Activity Book would make a suitable homework task. You could also give learners Worksheet 5.1a to do for homework. | In your next lesson learners could swap books to check each other’s homework task.  Go through the answers in class. | | Battery Conductor (of electricity)  Insulator (of electricity) | |  |
| **FEBRUARY/ MARCH** | | | | | | | | | | | | | |
| **Week 24**  **(28/02/2021-04/03/2021)** | Blended | **Electrical conductors and insulators**  **5.2. Does water conduct electricity?**  (Number of lessons required approx. 1) | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.    Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.    Use recognised symbols when representing a simple circuit in a diagram. | Investigate how some materials are better conductors of electricity than others.  Collect evidence and data to test ideas including predictions.  Make predictions using scientific knowledge and understanding.  Make a variety of relevant observations and measurements using simple apparatus correctly.  Make comparisons.  Use results to draw conclusions and make further predictions.  Say whether and how the evidence supports any prediction made.  Identify factors that are relevant to a particular situation. | Year 4 (Electricity) | English, ICT, Maths | Refer to teaching ideas in Unit 5 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 5.2, Question 1, 2, 3, 4, 5.  **Resources in Activity Book:** Exercise 5.2.  **Practical Activities:** Activity 5.2. from Teaching ideas 5.2. | Exercise 5.2 in the Activity Book. | The class could assess each other’s signs to put in a restaurant kitchen (Question 4 in Exercise 5.2 in the Activity Book). They could rate them on a scale of 1 to 5 according to:  is it eye-catching (drawing, colour)  does it have a clear message? (simple and short)  is it easy to understand (some workers may not have English as a first language) | | Distilled (water)  Pure (water) | |  |
| Blended | **Electrical conductors and insulators**  **5.3. Do different metals conduct electricity equally well?**  (Number of lessons required approx. 1) | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.  Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.  Use recognised symbols when representing a simple circuit in a diagram. | Investigate how some metals are good conductors of electricity and most other materials are not.  Collect evidence and data to test ideas including predictions.  Make predictions using scientific knowledge and understanding.  Decide when observations and measurements need to be checked by repeating to give more reliable data.  Use a table, bar chart or line graph to present results.  Make comparisons.  Use results to draw conclusions and make further predictions. | Year 4 (Electricity) | English, ICT, Maths | Refer to teaching ideas in Unit 5 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 5.3, Question 1, 2, 3, 4, 5 Challenge question.  **Resources in Activity Book:** Exercise 5.3.  **Resources in Teacher’s resource:**  Worksheet 5.3a, 5.3b.  **Practical Activities:** Activity 5.3. from Teaching ideas 5.3. | Exercise 5.3 in the Activity Book is a good exercise for learners to consolidate and apply what they have learnt and also practise graph drawing.  Another homework idea is that learners could be asked to research the use of lighting conductors in advance of a class discussion based on the *Talk about it!* question. | In your next lesson learners could swap books to check each other’s homework task.  Go through the answers in class. Assess the bar chart as follows:  is the amps value of each metal entered accurately  is the graph neatly drawn  has the graph got a heading? | | Ampere  Connector  Multimeter | |  |
| **Week 25**  **(07/03/2021-11/03/2021)** | Blended | **Electrical conductors and insulators**  **5.4. Choosing the right materials for electrical appliances.**  (Number of lessons required approx. 1) | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.  Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.  Use recognised symbols when representing a simple circuit in a diagram. | Know why metals are used for cables and wires and why plastics are used to cover wires and as covers for plugs and switches.  Make predictions using scientific knowledge and understanding. | Year 4 (Electricity) | English, ICT, Maths | Refer to teaching ideas in Unit 5 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 5.4, Question 1, 2, 3.  **Resources in Activity Book:** Exercise 5.4.  **Practical Activities:** Activity 5.4. from Teaching ideas 5.4. | Exercise 5.4 in the Activity Book provides an opportunity for learners to consolidate and use what they have learnt in the topic and apply it to a new situation.  Learners could be asked to do the poster (Question 3 in the Learner’s Book) as a homework task. | You could use this rubric for assessment of the poster in Question 3 in the Learner’s Book:   |  |  | | --- | --- | | **Mark out of 10** | **Description of poster** | | 8−10 | eye catching, imaginative, colourful with clear and simple information message | | 6−7 | eye catching, colourful with good information |   **Keywords:**  Plug | | | | |
| Blended | **Electrical conductors and insulators**  **5.5. Circuit symbols.**  (Number of lessons required approx. 1) | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.  Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.  Use recognised symbols when representing a simple circuit in a diagram. | Can represent series circuits with drawings and conventional symbols. | Year 4 (Electricity) | English, ICT, Maths | Refer to teaching ideas in Unit 5 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 5.5, Question 1, 2, 3.  **Resources in Activity Book:** Exercise 5.5.  **Resources in Teacher’s resource:**  Worksheet 5.5.  **Practical Activities:** Activity 5.5. from Teaching ideas 5.5. | Exercise 5.5 in the Activity Book allows learners to consolidate what they have learnt about circuit symbols.  Worksheet 5.5 gives learners the opportunity to draw a circuit using symbols. | You could go through the answers to Learner’s Book Questions 2 and 3 in class. Draw the circuit diagrams on the board and let learners check their own work.  Learners can check their own answers to Exercise 5.5 in the Activity Book by comparing it to the table in the Learner’s Book. | | Circuit diagram,  Series circuit | |  |
| **Week 26**  **(14/03/2021-18/03/2021)** | Blended | **Electrical conductors and insulators**  **5.6. Changing the number of components.**  (Number of lessons required approx. 2) | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.  Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.  Use recognised symbols when representing a simple circuit in a diagram. | Can predict and test the effects of making changes to circuits including length and thickness of wire and the number and types of components.  Can represent series circuits with drawings and conventional symbols.  Collect evidence and data to test ideas including predictions.  Discuss how to turn ideas into a form that can be tested.  Make predictions using scientific knowledge and understanding.  Choose what evidence to collect to investigate a question, ensure that the evidence is sufficient.  Choose which equipment to use.  Decide when observations and measurements need to be checked by repeating to give more reliable data.  Use results to draw conclusions and make further predictions.  Say whether and how the evidence supports any prediction made.  Identify factors that are relevant to a particular situation. | Year 4 (Electricity) | English, ICT, Maths | Refer to teaching ideas in Unit 5 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 5.6a, 5.6b. Question 1, 2, 3.  **Resources in Activity Book:** Exercise 5.6.  **Resources in Teacher’s resource:**  Worksheet 5.6a, 5.6b.  **Practical Activities:** Activity 5.6a, 5.6. from Teaching ideas 5.6. | Exercis 5.6 in the Activity Book is a good homework activity. It combines multiple choice questions with drawing circuits. Worksheet 5.6b is also a good homework activity where learners must predict the changes to circuits. It will take about 10 minutes. | You could assess groups on how well they carried out Activity 5.6b.   |  |  |  |  | | --- | --- | --- | --- | |  | **Very well** | **Adequately** | **Could have been better** | | 1 Did they collect and use suitable apparatus? | 3 | 2 | 1 | | 2 Did they make a good prediction? | 3 | 2 | 1 | | 3 Did they connect their circuit so that it worked? | 3 | 2 | 1 | | 4 How well did their prediction match their results? | 3 | 2 | 1 | | 5 Did they repeat any observations that they were not sure of? | 3 | 2 | 1 | | 6 How well did they explain the results of their test in response to their question to test? | 3 | 2 | 1 | | | | | |
| Blended | **Electrical conductors and insulators**  **5.7. Adding different components.**  (Number of lessons required approx. 2) | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.  Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.  Use recognised symbols when representing a simple circuit in a diagram. | Can predict and test the effects of making changes to circuits including length and thickness of wire and the number and types of components.  Can represent series circuits with drawings and conventional symbols.  Collect evidence and data to test ideas including predictions.  Discuss how to turn ideas into a form that can be tested.  Make predictions using scientific knowledge and understanding.  Choose what evidence to collect to investigate a question, ensure that the evidence is sufficient.  Choose which equipment to use.  Decide when observations and measurements need to be checked by repeating to give more reliable data.  Use results to draw conclusions and make further predictions.  Say whether and how the evidence supports any prediction made. | Year 4 (Electricity) | English, ICT, Maths | Refer to teaching ideas in Unit 5 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 5.7 Question 1, 2, 3.  **Resources in Activity Book:** Exercise 5.7.  **Practical Activities:** Activity 5.7 from Teaching ideas 5.7. | Exercise 5.7 in the Activity Book is a good consolidation activity on this topic. Learners have to apply what they have learnt. | You may like to use the table below to assess learners’ group work again to see if there have been improvements.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | **Very well** | **Adequately** | **Could have been better** | **Is group working better or not?** | | 1 Did they collect and use suitable apparatus? | 3 | 2 | 1 |  | | 2 Did they make a good prediction? | 3 | 2 | 1 |  | | 3 Did they connect their circuit so that it worked? | 3 | 2 | 1 |  | | 4 How well did their prediction match their results? | 3 | 2 | 1 |  | | 5 Did they repeat any observations that they were not sure of? | 3 | 2 | 1 |  | | 6 How well did they explain the results of their test in response to their question to test? | 3 | 2 | 1 |  | | | | | |
| **Week 27**  **(21/03/2021-25/03/2021)** | Blended | **Electrical conductors and insulators**  **5.8. Length and thickness of wire in a circuit.**  (Number of lessons required approx. 2) | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.  Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.  Use recognised symbols when representing a simple circuit in a diagram. | Can predict and test the effects of making changes to circuits including length and thickness of wire and the number and types of components.  Collect evidence and data to test ideas including predictions.  Discuss how to turn ideas into a form that can be tested.  Make predictions using scientific knowledge and understanding.  Choose what evidence to collect to investigate a question, ensure that the evidence is sufficient.  Choose which equipment to use.  Decide when observations and measurements need to be checked by repeating to give more reliable data.  Use results to draw conclusions and make further predictions.  Say whether and how the evidence supports any prediction made. | Year 4 (Electricity) | English, ICT, Maths | Refer to teaching ideas in Unit 5 resources  <https://elspvtdubai-my.sharepoint.com/:f:/p/sausan/Ej0cpeDSjgxCv1837knVDhQBYW4pBPySs3uHpfDf70BaPg?e=f5ku8d>  **Resources in Learner’s Book:**  Activity 5.8 Question 1, 2, 3, 4.  Challenge question.  **Resources in Activity Book:** Exercise 5.8.  **Resources in Teacher’s resource:**  Worksheet 5.8a, 5.8b  **Practical Activities:** Activity 5.8. from Teaching ideas 5.8. | Exercise 5.8 in the Activity Book is a good way of revisiting the topic.  Worksheet 5.8b is also a possible homework task. | It is important that you go through the answers to the questions in the Learner’s Book and Exercise 5.8 in the Activity Book in class to make sure that learners have understood the work. They can check their own work. Make sure they understand where they have made mistakes. | | Pressure  Resistance | |  |
| Blended | **Electrical conductors and insulators** | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.  Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.  Use recognised symbols when representing a simple circuit in a diagram. | **Unit Test 5+Research activity from Wonderopolis**  [**https://wonderopolis.org/wonders?category=&subcategory=&order\_by=&q=circuits**](https://wonderopolis.org/wonders?category=&subcategory=&order_by=&q=circuits)  **Provide practice questions from GL PTS reports**  [Year 7](onenote:https://elspvtdubai.sharepoint.com/sites/ELSScience/SiteAssets/ELS%20Science%20Notebook/GL%20Progress%20Test%20Group%20Reports%20for%20Teachers.one#Year%207&section-id={57CF1F95-3A76-45BD-97AC-E5B990181957}&page-id={4880FB55-8E3A-406A-8406-EE7334B47329}&end)  ([Web view](https://elspvtdubai.sharepoint.com/sites/ELSScience/_layouts/OneNote.aspx?id=%2Fsites%2FELSScience%2FSiteAssets%2FELS%20Science%20Notebook&wd=target%28GL%20Progress%20Test%20Group%20Reports%20for%20Teachers.one%7C57CF1F95-3A76-45BD-97AC-E5B990181957%2FYear%207%7C4880FB55-8E3A-406A-8406-EE7334B47329%2F%29)) | | | | | | | | | |
| Blended | **Forces and motion**  (Challenge book**)** | **4.3. Balanced and unbalanced forces**  **4.5. Forces and energy**  **4.6. Friction**  **4.7. Investigating friction** | | | | | | | | | | |
| Blended | **Electrical conductors and insulators**  (Challenge book) | **5.2. Does water conduct electricity?**  **5.3. Do different metals conduct electricity equally well?**  **5.6. Changing the number of components**  **5.8. Length and thickness of wire in a circuit**  ***5.9. How scientists invented batteries. (This lesson can be excluded if time constraints are there)*** | | | | | | | | | | |
| **Spring Break**  **(28/03/2021-08/04/2021)** | | | | | | | | | | | | | |