**e-RPH SCIENCE FORM 5**

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| **DAILY LESSON PLAN** | | | |
| **CLASS** |  | **WEEK** |  |
| **THEME** | Maintenance and Continuity of Life | **DATE** |  |
| **CHAPTER** | 1.0 Microorganisms | **DAY** |  |
| **TITLE** | Various Types of Microorganisms | **TIME** |  |
| **LEARNING OBJECTIVES** | | | |
| By the end of the PdPc, students will be able to:   1. Classify various groups of microorganisms into bacteria, fungi, protozoa, viruses and algae 2. List the characteristics of different types of microorganisms | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | |
| **Introduction:**   1. Students listen to the teacher’s explanation about the microorganisms found around us. 2. Students and teachers do questioning and answering (Q&A) sessions to test the level of students’ existing knowledge. | | | |
| **Activities:**   1. Students are divided into 'expert' groups as follows:  * Group A: Bacteria * Group B: Protozoa * Group C: Viruses * Group D: Fungi * Group E: Algae  1. Each group member is given a number such as 1, 2, 3, 4, ... 2. Each group is provided with resources and information to study the type of microorganism given in terms of structure, shape, habitat, nutrition, reproduction and so on. 3. After 15 minutes, the students are organised by the teacher into the following groups:  * Group 1: Students holding number 1 * Group 2: Students holding number 2 and so on  1. The 'experts' for a specific topic in each group will pass on their information about a specific type of microorganism to the others. Group members receive information from 'experts'. 2. Afterwards, students answer quiz questions from the teacher to test their understanding. | | | |
| **Closure:**  Students are answering questions in Amali Sains Tingkatan 5 pages 68 - 71. | | | |
| **REFLECTION** | | | |
| \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to achieve the learning objectives.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to complete the exercises given.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students need extra exercise and teacher guidance.  Note: Today’s lesson will be carried forward due to:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| **DAILY LESSON PLAN** | | | |
| **CLASS** |  | **WEEK** |  |
| **THEME** | Maintenance and Continuity of Life | **DATE** |  |
| **CHAPTER** | 1.0 Microorganisms | **DAY** |  |
| **TITLE** | The Presence of Microorganisms | **TIME** |  |
| **LEARNING OBJECTIVES** | | | |
| By the end of the PdPc, students will be able to:   1. Conduct experiments to demonstrate the presence of microorganisms by applying the correct Science Process Skills (SPS). | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | |
| **Introduction:**   1. The teacher explains to the students about the experimental procedure that will be carried out. 2. Students and teachers do questioning and answering (Q&A) sessions to test the level of students’ existing knowledge. | | | |
| **Activities:**   1. Students are divided into several groups. 2. Students are asked to carry out an experiment by referring to the procedure in Eksperimen Wajib 1. 3. After three days, students record the results of their observations. | | | |
| **Closure:**  Students are answering questions in Amali Sains Tingkatan 5 pages 6 - 10. | | | |
| **REFLECTION** | | | |
| \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to achieve the learning objectives.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to complete the exercises given.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students need extra exercise and teacher guidance.  Note: Today’s lesson will be carried forward due to:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |

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| **DAILY LESSON PLAN** | | | |
| **CLASS** |  | **WEEK** |  |
| **THEME** | Maintenance and Continuity of Life | **DATE** |  |
| **CHAPTER** | 1.0 Microorganisms | **DAY** |  |
| **TITLE** | Factors that Affect the Growth of Microorganisms | **TIME** |  |
| **LEARNING OBJECTIVES** | | | |
| By the end of the PdPc, students will be able to:   1. List five factors that affect the growth of microorganisms 2. Conduct experiments to study factors that affect the growth of microorganisms by applying the correct Science Process Skills (SPS) | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | |
| **Introduction:**   1. The teacher explains to the students about the experimental procedure that will be carried out. 2. Students and teachers do questioning and answering (Q&A) sessions to test the level of students’ existing knowledge. | | | |
| **Activities:**   1. Students are divided into four groups. 2. Each group is given an envelope by the teacher, each envelope contains one of the following questions: 3. Do nutrients and moisture affect the growth of microorganisms? 4. How does light affect bacterial growth? 5. How does temperature affect bacterial growth? 6. How does pH affect bacterial growth? 7. Each group is asked to carry out their own experiments and tasks based on the envelope. 8. Each group is asked to refer to the procedures in Eksperimen Wajib 2 – 6 based on their respective tasks. 9. Each group is given a week to prepare a presentation of the experimental findings in the form of a multimedia presentation. 10. After a week, a representative from each group is asked to present the findings of the experiment in front of the class. 11. A Q&A session is held afterwards. 12. Students listen to the overall summary made by the teacher based on the presentation of each group's experimental findings. | | | |
| **Closure:**  Students are answering questions in Amali Sains Tingkatan 5 pages 11 - 30. | | | |
| **REFLECTION** | | | |
| \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to achieve the learning objectives.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to complete the exercises given.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students need extra exercise and teacher guidance.  Note: Today’s lesson will be carried forward due to:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| **DAILY LESSON PLAN** | | | |
| **CLASS** |  | **WEEK** |  |
| **THEME** | Maintenance and Continuity of Life | **DATE** |  |
| **CHAPTER** | 1.0 Microorganisms | **DAY** |  |
| **TITLE** | Application of Useful Microorganisms in Daily Life | **TIME** |  |
| **LEARNING OBJECTIVES** | | | |
| By the end of the PdPc, students will be able to:   1. List four useful applications of microorganisms in daily life | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | |
| **Introduction:**   1. Students listen to the teacher’s explanation about the application of beneficial microorganisms in life. 2. Students and teachers do questioning and answering (Q&A) sessions to test the level of students’ existing knowledge. | | | |
| **Activities:**   1. Students are divided into four groups according to the following topics: 2. The use and role of useful microorganisms in food digestion 3. The use and role of useful microorganisms in medicine 4. The use and role of useful microorganisms in agriculture 5. The use and role of useful microorganisms in industry 6. Each group is asked to gather information according to their respective topics. 7. Students discuss and prepare the information obtained on flip chart paper for presentation. 8. Students paste the flip chart paper at their respective group stations. 9. Students move from one station to another station in groups. 10. Students are encouraged to discuss and comment on the material at each station. 11. After the Gallery Walk activity, the teacher held a brainstorming session for the students to give ideas about the potential development and use of microorganisms in other fields. | | | |
| **Closure:**  Students are answering questions in Amali Sains Tingkatan 5 pages 72 - 73. | | | |
| **REFLECTION** | | | |
| \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to achieve the learning objectives.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to complete the exercises given.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students need extra exercise and teacher guidance.  Note: Today’s lesson will be carried forward due to:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |

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| **DAILY LESSON PLAN** | | | |
| **CLASS** |  | **WEEK** |  |
| **THEME** | Maintenance and Continuity of Life | **DATE** |  |
| **CHAPTER** | 1.0 Microorganisms | **DAY** |  |
| **TITLE** | Potential Use of Microorganisms in Biotechnology and Sustainability of the Environment | **TIME** |  |
| **LEARNING OBJECTIVES** | | | |
| By the end of the PdPc, students will be able to:   1. Generate ideas for the potential use of microorganisms in biotechnology and suistainability of the environment | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | |
| **Introduction:**   1. Students listen to the teacher’s explanation about the potential use of microorganisms in biotechnology and suistainability of the environment. | | | |
| **Activities:**   1. Several students are chosen by the teacher to be 'experts' on the topic of the use of microorganisms in biotechnology and the suistainability of the environment. 2. The selected students will be given time to find information on the following topics: 3. Production of liquid organic fertilisers from fruit waste 4. Wastewater treatment using microorganisms 5. The potential use of other microorganisms in biotechnology 6. Each of these 'experts' will be placed in small groups. 7. The 'expert' will answer questions related to the topic asked by group members. | | | |
| **Closure:**  Students are answering questions in Amali Sains Tingkatan 5 pages 74 - 75. | | | |
| **REFLECTION** | | | |
| \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to achieve the learning objectives.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to complete the exercises given.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students need extra exercise and teacher guidance.  Note: Today’s lesson will be carried forward due to:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |

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| **DAILY LESSON PLAN** | | | |
| **CLASS** |  | **WEEK** |  |
| **THEME** | Maintenance and Continuity of Life | **DATE** |  |
| **CHAPTER** | 1.0 Microorganisms | **DAY** |  |
| **TITLE** | Aseptic Technique | **TIME** |  |
| **LEARNING OBJECTIVES** | | | |
| By the end of the PdPc, students will be able to:   1. Explain at least three aseptic techniques in controlling the spread of microorganisms | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | |
| **Introduction:**   1. Students listen to the teacher’s explanation about aseptic techniques in controlling the spread of microorganisms. | | | |
| **Activities:**   1. Students are divided into several groups according to aseptic techniques as follows: 2. Sterilisation 3. Boiling 4. Use of disinfectants 5. Use of antiseptics 6. Use of radiation 7. Each group searches for information and discusses their respective aseptic techniques. 8. Next, each group prepares presentation materials on flip chart paper. 9. One of the group members will stand in front of the station to explain to the students who visit the station. 10. The remaining group members will visit other groups to get information about other aseptic techniques. 11. Group members then return to their respective groups and share information with the remaining friends. | | | |
| **Closure:**  Students are answering questions in Amali Sains Tingkatan 5 page 76. | | | |
| **REFLECTION** | | | |
| \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to achieve the learning objectives.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to complete the exercises given.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students need extra exercise and teacher guidance.  Note: Today’s lesson will be carried forward due to:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| **DAILY LESSON PLAN** | | | |
| **CLASS** |  | **WEEK** |  |
| **THEME** | Maintenance and Continuity of Life | **DATE** |  |
| **CHAPTER** | 1.0 Microorganisms | **DAY** |  |
| **TITLE** | Effects of Antibiotics (Penicillin) on the Growth of Bacteria | **TIME** |  |
| **LEARNING OBJECTIVES** | | | |
| By the end of the PdPc, students will be able to:   1. Conduct experiments to study the effect of antibiotics on the growth of bacteria by applying the correct Science Process Skills (SPS). | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | |
| **Introduction:**   1. The teacher explains to the students about the experimental procedure that will be carried out. 2. Students and teachers do questioning and answering (Q&A) sessions to test the level of students’ existing knowledge. | | | |
| **Activities:**   1. Students are divided into several groups. 2. Students are asked to carry out experiments by referring to the procedure in Eksperimen Wajib 7. 3. After three days, students record the results of their observations. | | | |
| **Closure:**  Students are answering questions in Amali Sains Tingkatan 5 pages 31 - 35. | | | |
| **REFLECTION** | | | |
| \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to achieve the learning objectives.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to complete the exercises given.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students need extra exercise and teacher guidance.  Note: Today’s lesson will be carried forward due to:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |

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| **DAILY LESSON PLAN** | | | |
| **CLASS** |  | **WEEK** |  |
| **THEME** | Maintenance and Continuity of Life | **DATE** |  |
| **CHAPTER** | 1.0 Microorganisms | **DAY** |  |
| **TITLE** | Methods of Treating Infectious Diseases | **TIME** |  |
| **LEARNING OBJECTIVES** | | | |
| By the end of the PdPc, students will be able to:   1. Describe a treatment method for different types of infectious diseases | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | |
| **Introduction:**   1. Students look at three pictures of infectious diseases shown by the teacher. 2. Students and teachers do questioning and answering (Q&A) sessions to test the level of students’ existing knowledge. | | | |
| **Activities:**   1. Students are divided into several groups. 2. Students determine the place, time and scenario. Refer to the following example:  * Place: Health clinic * Scenario: A doctor explains the function of different types of drugs (antiviral, antibiotic and antifungal) to patients with different health issues and the dangers of overusing the drug. * Role 1: Doctor * Role 2: Patient with bacterial lung disease * Role 3: Patient with athlete'sfoot * Role 4: Patient with shingles  1. Each group is given 15 minutes to brainstorm and prepare a dialogue script. 2. All groups are given the opportunity to perform in front of the class. | | | |
| **Closure:**  Students are answering questions in Amali Sains Tingkatan 5 page 77. | | | |
| **REFLECTION** | | | |
| \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to achieve the learning objectives.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students able to complete the exercises given.  \_\_\_\_\_\_ / \_\_\_\_\_\_ students need extra exercise and teacher guidance.  Note: Today’s lesson will be carried forward due to:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |