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| Changes in nature | 11.26.2018 |

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| Subject |  | Overview |
| |  | | --- | | Basic Science | | Prepared By | | [Instructor Name] | | Grade Level | | 3 | |  | This lesson plan covers teaching content for;   1. Temporary (reversible) Changes. 2. Permanent (irreversible) Changes. |

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| Materials Required -Soda  - Bicarbonate of soda.  -Raw eggs  -Vinegar  -Glass jar  -Pieces of wood  -Matches  -Kerosene |
| Additional Resources  * <https://www.teacherspayteachers.com/Browse/Search:reversible%20irreversible%20changes> * <http://vlcguides.wcdsb.ca/Gr3Science> * <https://www.tes.com/teaching-resource/reversible-and-irreversible-changes-6304678> * <https://brainly.in/question/1288795> * <http://www.schoolofdragons.com/resources/reversible-or-irreversible> * <http://www.collaborativelearning.org/reversiblechange.pdf> |
| Additional Notes |

|  |  | Teacher Guide |  | Guided Practice |
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| **Objectives** Students will be able to:   1. State the meaning of change. 2. Mention the changes they observe in their surroundings. 3. State the differences between temporary and permanent changes; 4. Give examples of temporary and permanent changes.  Information/Instruction  1. Have your students know that changes are temporary or permanent? 2. When rain falls, the ground gets wet (temporary), plant and grass start to grow (permanent), the weather get cool and comfortable (temporary). 3. When the sun rises, the ground gets dry (temporary), plants and grasses remain the same or dried up (permanent), the weather becomes warm and sometimes, uncomfortable (temporary). 4. Temporary changes are reversible changes. These are changes that are only for a period of time. 5. Permanent changes are irreversible changes. Permanent changes are the changes which remain for a longer time and are not reversible. |  | **Day 1/Lesson 1- 15 Mins**  **Burning (Irreversible)**   1. Take the students outside. 2. Review the meaning of irreversible changes. 3. Have them know that burning is an example of an irreversible change. 4. Gather pieces of wood together, pour kerosene and light the pieces of wood. 5. Make sure you completely burn the pieces of wood to get ash and smoke. 6. Ask the students, where did the woods go? Can we get the woods back? 7. Let them answer you. 8. Tell them you cannot change the ash and smoke back to wood again.   **Day 3/ Lesson 3- 15 mins**  **Melting (Reversible)**   1. Gather students in one group. 2. Place a small gas cooker on a table. 3. Light the gas cooker and place a pot on it. 4. Demonstrate the melting (converting solid to liquid) process by pouring ice cubes in the pot. 5. Have them predict what will happen to the ice cubes. 6. Ask student to observe the ice as it reduces and turns to water. |  | **Day 2/Lesson 2- 15 mins**  **Mixing (Irreversible)**   1. Place on a table a cup of vinegar and another cup of bicarbonate of soda. 2. Tell your students that mixing substances can cause an irreversible change. 3. Demonstrate an example. Get a glass jar, pour a little quantity of vinegar and bicarbonate of soda and mix together. 4. The mixture changes and lots of bubbles of carbon dioxide are made. 5. Have the students observe the mixture? 6. Ask if the mixture can be reversible or not. 7. Tell them, these bubbles and the liquid mixture left behind, cannot be turned back into vinegar and bicarbonate of soda again.   **Day 4/Lesson 4- 15 mins**  **Freezing (Reversible)**   1. Tell your students **freezing** is a reversible change. 2. Show students a jar of frozen juice (keep the juice in a freezer a day before the class) 3. Ask students to predict what will happen to the blocked juice over time. 4. You should record a list of the students' predictions. 5. Keep the juice aside and discuss the students’ predictions. 6. Ask them to watch as the blocked juice turned into liquid. |
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| Assessment Activity  1. Through guided questions, close monitoring and informal observation; you will be able to assess students’ ability and understanding of the subject being introduced. |  | Assessment Activity |  |  |
| Summary |  |  |  |  |