|  |  |
| --- | --- |
| Changes in weather | 11.26.2018 |

|  |  |  |
| --- | --- | --- |
| Subject |  | Overview |
| |  | | --- | | Basic Science | | Prepared By | | [Instructor Name] | | Grade Level | | 3 | |  | This lesson plan covers teaching content for;   1. Weather. 2. The factors affecting weather. 3. Weather instruments. 4. Weather symbols. 5. Weather records. |

|  |
| --- |
| Materials Required -Glass jar, Small strainer, Water, Pencil  - Ice cubes  -2-litre plastic bottle, Masking tape,  -Hot water, Ice cubes  - Paper cup, straw, pin,  -paper plate, construction paper scraps  **-**Glass of water,  -sheet of white paper  - A dry empty frozen-juice can  with lid removed (or coffee can)  -latex balloon, rubber band, tape,  -2 drinking straws, card stock |
| Additional Resources  * <https://www.scribd.com/document/331115860/3rd-Grade-Lesson-Plan-Weather> * <http://www.ciese.org/curriculum/weatherproj2/en/lesson4.shtml>v * <https://study.com/academy/lesson/seasonal-weather-lesson-plan.html> * <https://www.eslkidstuff.com/lesson-plans/weather.html> * <https://www.scholastic.com/teachers/lesson-plans/teaching-content/forecast-weather-weather-watch-lesson-grades-3-5/> |
| Additional Notes |

|  |  | Teacher Guide |  | Guided Practice |
| --- | --- | --- | --- | --- |
| **Objectives** Students will be able to:   1. Explain the meaning of weather. 2. Identify the factors affecting the weather. 3. Relate weather conditions to changes in these factors. 4. Identify the standard weather conditions related to changes in these factors. 5. Name the standard weather instruments. 6. Improvise simple weather instruments.  Information/Instruction  1. Explain the meaning of weather. 2. Discuss factors affecting the weather. 3. Have them suggest how these factors determine changes.   . |  | **Day 1/Lesson 1- 15 Mins**  **Creating a rain gauge** (used for measuring rain volume)   1. Work with students to create a rain gauge (directions to follow). 2. Cut away the top third of the 2-litre plastic bottle. 3. Pack a few stones at the bottom of the bottle. 4. Pour water in until just above the stone level. 5. Draw a scale on a piece of masking tape with the help of the ruler and paste it on the side of the bottle so you can start counting just above the current water line. 6. Invert the top of the bottle and place it into the bottle to act as a funnel. 7. Leave bottle outside to capture rain. 8. Have students record water level changes daily.   **Day 3/Lesson 3- 15 mins**  **Creating a** **barometer**   1. Cut off the stiff band of the balloon. Stretch the balloon over the top of the juice can. 2. Secure a rubber band around the balloon to hold it securely. 3. Tape the end of the drinking straw to the center of the balloon surface, making sure it hangs off to one side. 4. Fold the card stock in half vertically and make hash marks every quarter inch. 5. Set barometer right next to the measurement card. As the external air pressure changes, it will cause the balloon to bend inward or outward at the center. 6. The tip of the straw will move up or down accordingly. Take pressure readings 5 or 6 times a day. |  | **Day 2/Lesson 2- 15 mins**  **Creating a wind Vane** (to determine which way the wind blows)   1. Poke a sharpened pencil through the bottom of a paper cup. 2. Insert a pin through the middle of a drinking straw and into the eraser of the pencil. 3. Make a cut approximately 1 inch deep on each end of the straw, making sure to go through both sides of the straw. 4. Cut small squares or triangles of construction paper and slip one into each end of the straw. 5. Place your wind vane onto a paper plate or piece of paper with the directions marked.     **Day 4/Lesson 4- 15 mins**  **Fog**   1. Fill up a jar completely with hot water for about a minute. 2. Pour out almost all the water, leaving about 1 inch in the jar. 3. Put the strainer over the top of the jar. 4. Place a few (3 or 4) ice cubes in the strainer. 5. As the cold air from the ice cubes collides with the warm, moist air in the bottle, 6. The water will condense, and fog will form. |
|  |  |  |  |  |
|  |  |  |  |  |
| Assessment Activity  1. Have them keep weather records. |  | Assessment Activity |  |  |
| Summary |  |  |  |  |