Co-Teaching Lesson Plan Date:

Sometime in September/October

| Teacher 1: Hannah Hannah | Teacher 2: | Urmila Seshadri | | | | | |
|--|-----------------------------|-----------------|--|--|--|--|--|
| Co-Teaching Approach(es): Place an X or a on the line in front of each approach outlined in the lesson. Parallel Teaching ✓ Team Teaching ✓ Station Teaching One Teach,One Observe ✓ One Teach,One Assist ✓ Alternative Teaching | | | | | | | |
| Subject: Weather | Topic/Lesson: Hurricanes | | | | | | |
| Standard(s): ES.12 The student will investigate and understand that energy transfer between the sun and Earth and its atmosphere drives weather and climate on Earth. Key concepts include: c) severe weather occurrences, such as tornados, hurricanes, and major storms. ES.10 The student will investigate and understand that oceans are complex, interactive physical, chemical, and biological systems and are subject to long- and short-term variations. Key concepts include: c) systems interactions. | | | | | | | |
| Lesson Outcomes: Student will create a model of the water cycle within two 2 liter bottles | | | | | | | |
| Materials Needed: Internet connection Live Action Server (LAS) - https://mynasadata.larc.nasa.gov/las/getUl.do Laptop Cart | | | | | | | |
| Vocabulary: atmosphere, biosphere, hurricane, hydrosphere, lithosphere, mitigation | | | | | | | |

| Lesson Component | Teacher 1 | Teacher 2 |
|---|--|--|
| Anticipatory Set Hurricane Matthew Newsela Article https://newsela.com/articles/hurricane- matthew-haiti/id/22508/ | Talk about previous encounters with hurricanes → Katrina relief in April | Talk about experience of family losi hurricane and having to start from scratch property and pretty much everything spec Pass out articles to students (class set, colored copies) - different reading levels |
| Co-Teaching Approach: Teaming and one teach, one assist | Ask students to discuss about their personal or family encounters with hurricanes | |
| Lesson: Activities/ Procedures Comparing the hydrosphere, atmosphere, geosphere, and biosphere using a concept comparison chart Co-Teaching Approach: Teaming | Allow students to have time to fill in the chart working with a partner. They may use previous resources to help them complete the comparison chart. Prompting questions to encourage students to share their responses | Step by step filling of class chart - using information gathered from students. • to be used as a clean copies for the student. Extension: How can you be prepared for a severe weather condition? |

Guided/Independent Practice

Students split into groups based on sphere of Earth -- focus on Hurricane Matthew time period 2016

https://mynasadata.larc.nasa.gov/las/get Ul.do

- Click on Data Set → Select whichever is appropriate for your group
- Be sure to select dates based on Hurricane Matthew
- Create plot
- After data is plotted, follow #5 here
- Use data to determine pathways of hurricanes
- Share with class findings

For those who finish early:
With your specific sphere, is there any human influence that could change things? What was a specific item that you learned from this lesson? What

you learned from this lesson? What steps could be taken to mitigate the potential impact on the sphere that you were studying? What specific conclusions were you able to draw when looking at your Live Access Server Plot? With regards to hurricanes, what direct impact is there on your sphere? Based on the sphere you were assigned, does the sphere influence the hurricane or the hurricane influence the sphere to a greater degree?

Co-Teaching Approach: Station Teaching

Help/monitor students with the site maneuvering, selecting the right sphere and time frame, create a color plot - using data from the above website and reporting.

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| Discussion questions with class: • What effect would there be if one of the spheres were missing from the Earth? For this question, choose a single sphere to be removed and list one or two things that might be a result of the removal of that sphere on a global and local scale. | Write responses on the board | Ask questions to the class and encourage discussions |
|--|---|--|
| Co-Teaching Approach: Teaming | | |
| Formative Assessment Strategies | | |
| What other questions can you come up with looking at your plot? | | |
| Co-Teaching Approach: Teaming | | |
| Homework | Complete study guide and use materials previously provided to review for upcoming assessment. | Study guide and visual (Vocab cards and GO) need to be reviewed to prepare for upcoming assessments. |

| Specially Designed Instruction and |
|---|
| Accommodations, Modifications for |
| Specific Students |

Repeat
directions, have
written on board,
and provide
handouts where
necessary
also display
website on
board for
students

Students will be able to use previous resources such as graphic organizers, slotted notes and vocab cards.

Provide a color plot sample ready for students to see and know what it should be like.

Co-Teaching Lesson Plan

| Teacher 1: Gen | eral Ed Teacher | _ Teacher | 2: SPED T | eacher | | |
|---|---|--|---|--|--|--|
| Co-Teaching Approach(es): Place an X or a ✓ on the line in front of each approach outlined in the lesson. — Parallel Teaching x Team Teaching — Station Teaching One Teach,One Observe X One Teach,One Assist — Alternative Teaching | | | | | | |
| Subject: Hydrologic Cycle | Topic/Lesson: | | Date: | | | |
| Standard(s): ES.8,2 | | | | | | |
| Lesson Outcomes: The student will investigate and understand how freshwater resources are influenced by geologic processes and the activities of humans. Key concepts include d) identification of sources of fresh water, including rivers, springs, and aquifers, with reference to the hydrologic cycle. The student will demonstrate an understanding of the nature of science and scientific reasoning and logic. Key concepts include c) observation and logic are essential for reaching a conclusion. | | | | | | |
| Materials Needed: Materials: Lamp, Water, Aluminum foil, Ice cubes, 2-liter plastic bottles, Scissors, sand, potting soil, tape, small plants (clover, grass seed, etc.) | | | | | | |
| Vocabulary: | | | | | | |
| Lesson Component | Teacher 1 | | Teacher 2 | | | |
| Anticipatory Set | Tell students to draw and label the hydrologic cycle. Circulate during this to prompt and assist., | | Circulate to prompt and assist | | | |
| | Draw a simple diagram to include a sun, water, slope, tree, and river | | | | | |
| Co-Teaching Approach:One teach one assist | Add parts of the water cycle giv | /en. | | | | |
| Lesson: Activities/ Procedures | Teacher will prompt missing parts of the water cycle and include definitions of processes to ensure a complete diagram. | | (ask guiding questions, add to the board diagram) | | | |
| Co-Teaching Approach: Team | comparison table with evap condensation. This teacher work on condensation and the | densation. This teacher's group will of k on condensation and then together will complete the table with student | | 2. This teacher's group will work on evaporation, and then facilitate the addition of this information to the completed table. | | |
| Guided/Independent Practice Co-Teaching Approach:Team | Using the materials provided, students will make a working model of the water cycle. Materials: Lamp, Water, Aluminum foil, Ice cubes, 2-liter plastic bottles, Scissors, sand, potting soil, tape, small plants (clover, grass seed, etc.) | | Teacher will circu approve plans as v | late, prompt, guide, and well. | | |