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| **Lesson Plan:** What’s the Forecast? | **Room Requirements & Arrangement:** Open space (if desk or chairs are in the way, these are to be moved to the walls of the room to create open space) |
| **Content Area & Arts Discipline:**  Science and Dance |  |
| **Overview of the Lesson:**  The role of precipitation and the resulting weather when met by warm and cool temperatures. The dance concept of bound vs. free, with a supporting emphasis on movement dynamics | **Materials/Equipment:** CD, boombox,  BINGO weather cards (4)  **School:** Madison Elementary School, Madison, MS |
| **Grade Level:** Kindergarten  (Ms. Cunningham’s class) | **Date Lesson Created:** January 2015 |
| **Proposed Time Frame:** 45 minutes | **Lesson Author:** Julie White |

**Big Ideas & Learning Objectives**

1. The student will be able to clearly identify various bodies of water, the process of water vaporizing to form clouds, and the effects of warm or cool air on resulting forms of precipitation (snow, ice, hail, rain, humidity).
2. The student will understand that water and temperature is central to weather patterns can occur.
3. The student will investigate bound vs. free movement and a diversity of dynamic choices when doing each type of movement (differentiation with other dance elements).
4. The student will work in small groups to create a “weather dance forecast” that involves showing two different types of weather through creative movement.

**Procedures**

***Affective Hook*:** Who has ever been lucky enough to see snow? How about ice? Hail? Who has ever experienced a hot and humid day? All of these types of weather result from moisture in the air and also whether it is hot or cold. If it is hot, it will rain or get humid and sticky. If it is cold, it will snow, sleet, or hail. Today we are learning about how clouds form and what type of weather occurs when temperatures change.

***Relevance*:** It is important to know the weather so that you can wear the right clothes, and also sometimes stay safe. In dance, it is important to know many ways to do movement so you can be as creative as possible. When you show your type of weather clearly with your movement, I want to also make sure that it is creative. This is where the challenge and the fun lie!

***Introduction of Participation Expectations***

This is a special kind of class. You need to give me your full attention and do your best to watch me as I teach. In a movement class, you follow-the-leader and what you see me do as much as you listen to what I am saying and follow spoken directions. You also want to be spatially aware and respectful of those around you. Keep your body to yourself and stay safe in your movement above all else – there is no room for horseplay if we are going to get to everything that we have planned! We will be working together in teams for part of this class, which is important to know how to do well, and I will be asking for volunteers to help me be leaders and demonstrators as well. I always choose students who are paying attention and eager to try things. Make it clear to me if this is you from the beginning of class so I notice you and ask you to help me teach! Finally, we have a special “cue” for attention in class because we are moving a lot. Doing a hand signal doesn’t work. (Model call-and-response and have students practice it several times). Any questions? Now we are ready to go.

***Warm-up*: *BrainDance***

*Music: Andy Monroe (Track #1)*

Follow my lead but feel free to explore. We will be moving in all different kinds of ways in the warm-up. Do your best to do everything clearly. We will do the warm-up in place.

* Breath – inhale with arms reaching up and down (clear skies, perfect sunny day)
* Tactile – brush, pat, squeeze, tap (raindrops, brushing off rain, warming up when cold outside)
* Core/Distal – reaching out (humid, big) and in (cold, small)
* Head/Tail – bobble head traveling down the spine, fast and slow motion (gentle breeze)
* Upper/Lower – strong wind/whip arms in all directions (upper), hard rain/stomping (lower)
* Right/Left – body parts then whole side of body (lightning on the right/stabbing, thunder on the left/shaking)
* Cross Lateral – slow marching with big legs (tromping through deep snow)
* Vestibular – spin three times to each side stopping in between to settle dizziness (tornado)

Center – have students sit cross-legged in place and take three deep breaths with an “ahhhhh” exhale, do eye-tracking, and have a moment of stillness

***Discussion:*** *We did all types of movement representing all types of weather during our warm-up. Who can remind me of one thing we did? Who had a favorite kind of weather or movement? Different kinds of weather have distinct patterns and characteristics. The same is true in dance. Movement can be done in many ways, but how it is done makes it unique. Pay attention to what changes in water temperature make either rain, snow, or ice and then make sure to show this creatively and clearly in your bodies when we dance.*

***Review of Concept: Precipitation and Temperature Effects on Weather***

Explain to the students that our planet is the only one in our solar system that has water and that because of this, we have a lot of different kinds of weather. Water is central to the kind of weather we have. Whether it is hot or cold and how these interact, will determine what kind of weather results.

***Introduction of Concept: Bound vs. Free, Movement Dynamics***

*Music: Andy Monroe (Track #3)*

*Exploration of the three stages of water: solid (ice), liquid (rain), and gas (vapor)*

* ***Solid:*** Ask the students to move in a bound way, not bending their elbows or knees. Have them try this standing and sitting. Ask them to be heavy in their movement as well, so everything takes a little bit more effort. Finally, compare their bound movement to being frozen like an icicle. If they bend, they break.
* ***Liquid:*** Have the students stand and review (with assigned movement for each one) the many different bodies of water that we have on our planet
  + ***Lake*** (gentle waves shown in the arms and then a soft slow rippling in the whole body)
  + ***Ocean*** (waves lapping up on shore shown in the arms and then with the whole body advancing and retreating)
  + ***River*** (arms parallel to each other winding right and left and then increase the distance between the hands to make a bigger river (the Mississippi River) and a smaller river (Pascagoula River)
  + ***Stream*** (have the finger walk forward in the air to represent a trickling and then have students use their whole bodies to bend around rocks, curve through cattails, and get shallow/smaller movements and deep/bigger movements as they go).
* ***Gas/Vapor:*** Explain to the students that when it gets hot outside, water evaporates and becomes vapor in the air. This vapor rises up to the atmosphere and forms clouds. Have the students start at low level (squat) and do the movement of their favorite body of water. Then ask them to slowly rise with floating arms to represent the water evaporating and then find a shape of a cloud at high level (standing and reaching upward). Have them repeat this three times, encouraging creativity in the shape of their cloud and clarity in the movement of their chosen water body and their ability to show vapor in movement.

***Discussion:*** *Take a moment to explain to students that once water has evaporated into the atmosphere and formed clouds, that the air interacts with them and is either warm or cool. If it is warm, the water comes back down to earth in the form of rain. If it is cool, it comes back down to earth in the form of sleet, ice, snow, or hail.*

***Development of Concept: Temperature Changes and the Result***

*Music: Andy Monroe (Track #4)*

Warm air results in rain. Ask students to explore the following (follow-the-leader):

* *Drizzle* (body doing wavy and sliding movements)
* *Gentle mist* (all body parts soft in movement with small movements in body parts)
* *Ploppy rain* (whole body jumping in all directions, upper body does gestures in response)
* *Pounding rain* (stomping in place)
* *Sideways rain* (feet planted and body bent to the side with waving arms, do both sides)
* *Thunderstorm* (lightning/stabbing arms and thunder/shaking body) combined with marching faster and slower to represent how rain comes in waves and can be calm or intense at different stages in this type of weather

***Culmination of Concept: Sharing a Weather Forecast through Movement***

*Music: Andy Monroe (Track #5/working in groups and Track #6/performing in groups)*

The students will be put into small groups (5 – 7 students each) and will be given a BINGO chart that lists out all different kinds of weather (see attached): breezy, chilly, clear, cloudy, cold, damp, dry, foggy, freezing, hail, hot, humid, hurricane, rainy, showery, snowy, stormy, sunny, sunshine, thunder, thunder showers, tornado, typhoon, warm, etc.

Each group will be directed to choose two types of weather to demonstrate and “forecast” for their peers. The teacher will encourage students to be creative with their movement choices but also clear, and remind them that not everyone in the group has to do the same movement. They just need to do the same kind of weather.

For added fun or to involve a hesitant student, a “weatherman” can be picked in the group, who role plays pointing to a weather map and verbally or physically (or both) shares this news as his group members dance it.

Allow 3 – 5 minutes for each group to 1) decide on the two types of weather they will dance, 2) investigate what kind of movement can be used to show these clearly and creatively, and 3) can perform their dance without talking and confidently (memorized).

***Differentiated Learning for Culminating Activity***

*Below Grade Level:* Have students demonstrate one type of weather

*On Grade Level:* Have students demonstrate two types of weather and encourage them to fully perform it (big, lots of energy, eyes up and out, working together as a group when dancing)

*Above Grade Level:* Have students demonstrate three types of weather or involve a weatherman that uses gesture to direct our attention and make the group’s changing weather clear

***Performance*** *(time allowing and volunteer only; ideally all groups show)*

Each group will be asked to share their “weather forecast dances.” The teacher will solicit feedback that focuses on what movement was creative, how clear movement was in showing a type of weather, and finally ask the observing students to guess what kind of weather the group did. All performers bow after performing, and all audience members clap before this discussion takes place. For added challenge, the teacher might ask if the weather they chose was a result of warm or cool air.

***Closure***

Today we reviewed the role that water, evaporation, and temperature have on the kinds of weather we experience. Who can tell me what happens when clouds are met with warm air? Right – rain! How about cold air? Right – snow and ice! Who can tell me what we call movement that is stiff and heavy? Right – bound! Who can tell me what we call movement that is light and flowing? Right – free! When I call on you, I want you to pick your favorite kind of weather and dance it to your place in line. Thank you again for your wonderful dancing and your hard work in here.

**Extended Learning Activities**

1. Relate weather to specific seasons and have students create a “spring dance,” “summer dance,” “fall dance,” and “winter dance.”
2. In visual arts or as a creative classroom activity, have students cut out a snowflake made of paper. Then ask them to work independently or in small groups, to show the snowflake in their bodies through body shaping and/or movement.
3. For homework or for extra credit, ask students to look up and share the weather forecasts for different parts of the country or the world. Then ask them to find a way to show this through movement. Each day of the week, a student could be assigned as a “weatherman” to share the weather that day, both verbally and creatively through movement.