

Effort Work

Objective: Explore opposite efforts through the use of the body

Materials: None

Vocabulary: Wide and Narrow, Low and High, Long and Short, Heavy and Light

Most Appreciated By: K-6

Time Estimate: 10-15 minutes

Procedure

1. Have students find their own space in the room.

2. Wide and Narrow

-Explore what wide feels like by having students stretch wide to make an X with their bodies.

-Explore what narrow feels like by having students bring arms and legs together.

-Work through wide and narrow by standing up and laying down on the floor.

-Ask students what things in the world are wide and narrow and embody those to continue to explore this idea. You can also work through starting wide in one of the concepts below and then becoming narrow with its match.

-Wide: snowflakes, blown up balloons, turtle coming out of its shell

-Narrow: melted snowflake drop, deflated balloons, turtle hiding in its shell

-Curricular Connection: Wide and Narrow can be used to explore how matter changes states. What happens if we are a narrow bubbling pot of water and then we become the wide steam that floats out of the pot? What happens if we are a wide snowflakes and then we melt into a narrow running river?

3. Low and High

-Explore what down low feels like by having students crouch down near to the floor.

-Explore what up high feels like by having students stretch up towards the ceiling.

-Ask students what things in the world are down low and up high and embody those to continue to explore this idea. You can also work through starting low in one of the concepts below and then becoming high with its match.

-Low: seed in the ground, small pebble, fresh cut grass

-High: trees growing up tall, big mountain, high prairie grass

-Curricular Connection: Low and High are deeply connected to gravity. When we are up high, what kind of balance does it take to stay up? What happens when we make our balance base less stable (standing on one leg, standing on one leg and bending over, etc.)? What does it feel like to give in to gravity and go from up high to down low quickly? Or slowly like we are melting?

3. Long and Short (other usable vocabulary is Sustained and Quick)

-Explore what long feels like by having students take long steps

-Explore what short feels like by having students take small steps

-Work through long and short by navigating from one side of the room to the other.

-Ask students what things move in long and short ways and embody those to continue to explore this idea.

-Long: stepping over puddles, big giraffe steps

-Short: jumping into puddles, tiny mouse steps

-Curricular Connection: Long and Short help us think about patterns in motion. Can you predict how long it will take to get across the room using only small mouse steps? What about big giraffe steps? Thinking about inertia, what would make you start doing long jumps over big puddles (is it suddenly pouring down rain)? What if you grew tired?

4. Heavy and Light

-Explore what heavy feels like by having students move in a heavy way.

-Explore what light feels like by having students move in a light way.

-Work through heavy and light by navigating through the room.

-Ask students what things move in heavy and light ways and embody those to continue to explore this idea.

-Heavy: giant elephants walking, stones falling, moving through a tornado

-Light: tiny birds flying, feathers falling, moving through a breeze

-Curricular connection: Heavy and Light can be used to explore force and push/pull. If we were a heavy stone what kind of force would it take to move us? What about if we were a light feather? What happens when we have force coming from more than one side (like two strong winds blowing against us at once)?

Notes & Modifications

This is another body shaping activity that can be modified to whatever you may be studying in class. Look at the concepts you are exploring, investigate the ways they manifest in the world, and then have your students embody them.

Exploring Biomes & Cycles

Objective: Develop spatial awareness and establish level, speed, and direction

Materials: Chimes if you'd like, images of your biome or cycle

Vocabulary: Low, Medium, and High Level, Speed, Direction

Most Appreciated By: K-6

Time Estimate: 30-45 minutes

Procedure

1. Have students stand in their own space in the room.

2. Exploring Speed

-Have students walk around the room at their normal walking speed without their voices; label this as speed three.

-Ask students to show you what a speed two looks like (slowing down).

-Ask students to show you what a speed one looks like (ultra slow motion).

-Take students back to speed three.

-Ask students to show you what a speed four looks like (a bit faster, not running).

-Ask students to show you what a speed five looks like (fastest, still not running).

-Call out different speeds and make it a challenge to switch rapidly.

3. Adding in a Freeze

-Continue to play with speed, but add in an occasional freeze (remind them of strong, sturdy freezing like in Shapes in Space).

-You can also sub in a pair of chimes to indicate the freeze if you'd rather not use your voice here. A simple "Go" restarts the movement. You can also set a new speed here if you'd like.

-Repeat until students have found a steady rhythm and are moving safely through the space.

4. Introduce an Environment: Water

-Freeze the students and indicate the next step: "Our room is slowly filling with water, when I say the word go, I want you to move through the room like the water is up to your ankles. Think about how that would change the way you move."

-Repeat this process, but increase the stakes by raising the water to waist height and then right below the chin (emphasize that they are not swimming, but moving through water).

4. Introduce an Environment: Jello

-Freeze the students and indicate the next step: "While you were moving around I decided to pour packets of my favorite jello powder into the water. When I say the word go, I want you to move through the room like it is full of thick jello. Think about how that would change the way you move."

-As they navigate the jello, call out the specific tactics you see them using to get through it (eating it, digging a tunnel, scooping it).

6. Layer in Levels

-Ask your students questions to encourage level exploration. "I wonder if you could get through the jello in low level? I wonder if you could get through it in high level?"

7. Introduce an Environment: Marshmallow

-Freeze the students and indicate the next step: “We got through the jello, but now I have added sticky, gooey marshmallows to our room. When I say the word go, I want you to move through the marshmallows. Think about how that would change the way you move.”

8. Layer in Direction

-Ask your students questions to encourage direction exploration. “I wonder if you could move through the marshmallows if you were going backwards? I wonder if you could get through it if you could only go sideways?”

-Allow them time to continue exploring these directions while reminding them of levels.

Curricular Connection

This is another activity that can be broken down into layers and done over time. Whether you layer it gradually or try it all at once, it provides students with the opportunity to consciously explore direction, speed, and texture that are not a part of our everyday movement vocabulary. You can use these concepts to continue to explore physics concepts, but you can also use them to explore biomes and cycles you are studying in class. For example, you might use this activity to take them through the layers of the rainforest and use levels, directions, and speed to aid in the journey. Or you might use it to explore and embody the four stages of the water cycle. After exploring the full procedure above, return to it and swap out your environments (water, jello, marshmallow) with the cycle steps. See suggestions below.

Introduce a Step: Evaporation

Utilize low level. Explore moving at different speeds through various bodies of water (fast moving rivers, slow rocking oceans, solid balanced ice, etc.). Practice moving up into high level as evaporating water vapors.

Introduce a Step: Condensation

Utilize all levels. Explore moving sideways, forwards, and backwards as free floating water vapor up in the air. Practice transforming from wide floating water vapor to narrow liquid water droplets.

Introduce a Step: Precipitation

Utilize all levels. Practice moving from high level to low levels as varying forms of precipitation. Explore slower speeds and turning directions as snow flakes and faster speeds and committed directions as hail and rain.

Introduce a Step: Collection

Utilize low level. Practice turning narrow bodies of water into wider bodies of water as they collect the precipitation. Explore being soil way down low absorbing the water. Play with direction and speed throughout.