ITQ ARTS AND SCIENCE INTEGRATION GRADE 3 THEATRE and PHYSICAL SCIENCE

What's the Matter You? Eh! – Creating Character "Matter and Energy," Investigations 3 and 4 LESSON #3

CONTENT STANDARDS

Theatre Grade Three

- **1.1** Use the vocabulary of theatre, such as character, setting, conflict, audience, motivation, props, stage areas, and blocking, to describe theatrical experiences.
- 1.2 Identify the 5 W's (who, what, where, when, and why) in a theatrical experience.
- 2.1 Participate in cooperative scriptwriting or improvisations that incorporate the 5 W's.
- **5.1** Develop problem-solving and cooperative skills to dramatize a story or current event from another content area, with an emphasis on the 5 W's.
- **5.2** Develop problem-solving and communication skills by participating collaboratively in theatrical experiences.

Science Grade Three

PS1e Students know matter has three forms: solid, liquid, and gas.

PS1f Students know evaporation and melting are changes that occur when objects are heated.

ESSENTIAL QUESTIONS (Questions students might ask about the topic)

- How can I show what I know with improvisation?
- How can I use my face and body to create character?
- How can I use improvisation to create a play?
- What are the three states of matter here on Earth?
- What are the characteristics of each state of matter?
- How can matter change from one state to another?

OBJECTIVES & STUDENT OUTCOMES (Students will be able to)

- infer from an improvised scene who the characters are, what they are doing, what they want, where/when the scene takes place and why the events are taking place.
- improvise scenes where the meaning changes when one or more of the 5 W's is altered.
- · demonstrate cooperative learning skills.
- define and be able to physically demonstrate the characteristics of matter.
- make predictions, report observations and form inferences.
- improvise a scene about the change of a solid to a liquid to a gas through the use of heat.

ASSESSMENT (Various strategies to evaluate effectiveness of instruction and student learning)

• Feedback for Teacher

- Observation of improvised scenes
- Video
- o Feedback

Feedback for Student

- Teacher and Peer Feedback
- o Video

WORDS TO KNOW

Theatre Grade 3

- character: the personality or part an actor recreates
- conflict: the opposition of persons or forces giving rise to dramatic action in a play
- gesture: an expressive movement of the body or limbs
- improvisation: a spontaneous style of theatre in which scenes are created without advance rehearsing or scripting.
- posture: a position the body can assume in sitting, standing, kneeling or lying down that gives clues

to a frame of mind or attitude toward someone or something

- pantomime: acting without words through facial expression, gesture, and movement
- personification: giving human traits to non-living objects
- scene: a location at which an event or action happens
- setting: the surroundings or environment in which a scene or character is found

Physical Science Grade 3

- evidence: data used to support claims. Evidence is based on observation and scientific data
- gas: matter that is shapeless and expands to fill a closed container
- **gesture:** an expressive movement of the body or limbs
- liquid: matter that flows and takes the shape of the container it is in
- matter: anything that has mass and takes up space
- observation: something that can been seen
- solid: matter that has a definite shape

MATERIALS

• "Beginning, Middle, End Planning Sheet" (included)

RESOURCES

- SDUSD Core Learnings: http://www.sandi.net/204510720114515653/site/default.asp
- Online improvisation lesson videos: http://www.ehow.com/video 4949233 improv-yes-lets.html
- The benefits of improv in addressing multiple intelligences web article. http://www.improvwarrior.com/benefits.html
- Theatre Games for the Classroom, Viola Spolin (available on Google Books at http://tinyurl.com/spolinbook)
- FOSS Kit 3rd Grade, "Matter and Energy," Investigations 3 and 4
- What is the World Made Of? by Kathleen Weidner Zoehfeld
- States of Matter by Fiona Bayrock
- Solids and Liquids by David Glover
- The websites below are a few resources to help explain how matter changes from:
 - http://www.blurtit.com/q119885.html
 - http://encyclopedia.kids.net.au/page/ph/Phases_of_matter
 - http://idahoptv.org/dialogue4kids/season7/matter/facts.cfm
 - http://jmsalsich.edublogs.org/2010/05/31/liquid-nitrogen/

PREPARATION

Copies of "Beginning, Middle, End Planning Sheet."

WARM UP (Engage students, access prior learning, review, hook or activity to focus the student for learning)

(10 minutes)

- Arrange students in a circle, each one having personal space.
- Together lead students through a physical warm up isolating different parts of the body and stretching. (rotate hands at wrist, roll shoulders backwards and forwards, rotate head at neck, gently swing hips from side to side, knee bends, rotate foot at ankle, lunges, stretching on tippy toes, hanging like a rag doll, slowly rolling up, shake each limb vigorously 8 times, then 4 times, then 2 times, then once)
- Lead students through a vocal warm up with yawning, humming up and down the scale, breath exercises expelling air with force from the diaphragm, loud and soft voice, and tongue twisters. ("Solid, Liquid, Gas", "Sally's Silly Solid is Sandy", "Goofy's Gas is Gaseous", "Lucinda Licks Up Liquid", "Adam's Atom", "Molecules Matter", "Triple Tested Test Tube", "Synthesize Hypothesize", "Olive's Observations Are Awful", "Percy Predicts Possible Problems")
- Assign each student a number: 1, 2 or 3.
- Tell students to sit in a circle.
- Assign each student a number: 1, 2 or 3
- Have all the number ones stand up.
- Tell the students all the number ones must cross the circle and sit down on the other side.
- Explain that as they cross the circle they should act as though they are moving through a particular

environment which you will give them. (i.e. move across the circle as though you are walking through syrup, water, jell-o, bouncy balls, fog or smoke)

- Then have the 2's and then the 3's cross the circle. Only call out a different environment.
- As you call out the different environments ask the students what form of matter are they walking through water, liquid or gas.

MODELING (Presentation of new material, demonstration of the process, direct instruction) (20 minutes)

- Review with students the process they went through in the previous lesson to create an improvisation about an ice cube becoming a gas.
- Have another group recreate their **improvisation** for the class.
- Remind students that a play must have a beginning, middle and an end.
- Introduce the "Beginning, Middle, End Planning Sheet."
- As a group brainstorm and fill out a sample of the sheet.
- Introduce the concept of a Story Board. This is a visual representation of the story you are creating.
- As a group, story board the events in the "Beginning, Middle, End Planning Sheet" of the **improvisation** they did about an ice cube becoming a **gas**.
- Demonstrate for the students how they can draw the events occurring in the beginning, middle, and end. Underneath each drawing for the beginning, middle, and end is where they can write about what is happening.
- Remind students they need to make sure the 5 W's (who, what, when, where and why) are being answered when they fill out the "Beginning, Middle, End Planning Sheet."
- Tell the students they are going to create a planned **improvised scene** showing what they know about the different states of **matter**, **solid**, **liquid**, or **gas**.
- Brainstorm with the students different examples of how matter changes form and chart their responses. (i.e. A chocolate bar, which is solid, melts and becomes chocolate syrup. A popsicle melts, Kool-aid wants to become popsicle, A marshmallow and chocolate want to become a S'more, or water wants to become a cloud.)
- Explain to students they will be working in there same groups of three and they will be using the "Beginning, Middle, End Planning Sheet" to plan their **improvised scene**.

GUIDED PRACTICE (Application of knowledge, problem solving, corrective feedback) (15 minutes)

- Direct students to get into their groups of three and handout one "Beginning, Middle, End Planning Sheet" for each group.
- Ask each group to choose one of the ideas charted in the modeling section. If they are not sure which idea to pick, assign one for them.
- Tell students to draw and write their planned improvisation (improv) scene.
- Remind students they are creating an improv to show their understanding the different states of
 matter. Also remind students they need to make sure the 5 W's (who, what, when, where and why)
 are being answered when they fill out the "Beginning, Middle, End Planning Sheet."
- Once the students have finished planning their improv scene they should practice acting it out.
- Walk around conferring with groups and side coach as needed...

DEBRIEF & REFLECT (Identify problems encountered, ask and answer questions, discuss solutions and learning that took place. Did students meet outcomes?) (5 minutes)

- Bring class back together.
- Have one or more groups to demonstrate their improvisation.
- Ask:
 - o How did the storyteller's movements, **gestures**, voice, and expressions help develop the **character**?
 - o How did the movements, gestures, voice, and expressions show the conflict and solution?
 - What was convincing about the character's actions and what could the character have done to make the scene stronger?
 - How could you tell the setting of this scene? What did the actors do to show setting to the audience?
 - o What did you learn about the qualities of a **solid**? A **liquid**? A **gas**?

- O How can a solid change to a gas?
- o What did you learn about the atoms and molecules in a solid, liquid and gas?
- Have students respond to the following prompt in their science notebooks: How did planning and practicing my **improvisation** help me understand the different states of matter?

EXTENSION (Expectations created by the teacher that encourage students to participate in further research, make connections, and apply understanding and skills previously learned to personal experiences.)

- Videotape the improvisation for the class to watch.
- Apply the same technique to create a play from another curricular area.

Beginning, Middle, End Planning Sheet

Draw what happens in the beginning.	Draw what happens in the middle.	Draw what happens in the ending.
Write a few sentences about what happens in the beginning.	Write a few sentences about what happens in the middle.	Write a few sentences about what happens in the ending.
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