

**ITQ ARTS AND SCIENCE INTEGRATION  
GRADE 3  
THEATRE and PHYSICAL SCIENCE**

**Show Me How You Feel! – Creating Character  
Observation and Inference  
“Matter and Energy,” Investigations 3 and 4  
LESSON #1**

**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**

- I & E5a Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.
- I & E5b Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.
- I & E5d Predict the outcome of a simple investigation and compare the result with the prediction.

**ESSENTIAL QUESTIONS** (*Questions students might ask about the topic*)

- How do I use what I know to create theatre?
- How can I use my face and body to create character?
- What is the difference between evidence and opinion?
- How can I use theatre to demonstrate inferring?

**OBJECTIVES & STUDENT OUTCOMES** (*Students will be able to.....*)

- identify and create setting, motivation, objectives, gestures and postures for a character.
- demonstrate cooperative learning skills.
- make predictions, report observations and make inferences based on observations.

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

- **Feedback for Teacher**
  - “Theatre Experiment #1” worksheet (included)
  - Observation
  - Video
  - Feedback
- **Feedback for Student**
  - Teacher and Peer Feedback
  - Video

**WORDS TO KNOW**

**Theatre Grade 3**

- **character:** the personality or part an actor recreates
- **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.
- **gesture:** an expressive movement of the body or limbs.

**Physical Science Grade 3**

- **evidence:** data used to support claims. Evidence is based on observation and scientific data.
- **observation:** something that can be seen
- **opinion:** a claim based on belief, not on scientific data or observations.

## MATERIALS

- Theatre Experiment #1 & 2 Sheet (included)
- “Expression Chart” (included)

## RESOURCES

- *SDUSD Core Learnings*
- *FOSS Kit 3<sup>rd</sup> Grade, “Matter and Energy,” Investigations 3 and 4*

## PREPARATION

- Copy “Theatre Experiment #1” worksheet.
- Copy “Expression Chart”

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

(10 minutes)

- Review with students that actors have three tools/instruments to do their work: voice, body and imagination.
- Each time an actor works they must tune up their instrument.
- 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 Awesome”, “Percy Predicts Possible Problems”)

## MODELING *(Presentation of new material, demonstration of the process, direct instruction)*

(15 minutes)

- **Say:**
  - *Now that we have warmed up our “instrument” we are ready to put it to work.*
  - *We are now going to conduct a theatre experiment. When we conduct experiments in science we have to make careful observation and know the difference between **evidence** and **inference**. We are going to use our theatre experiment to explore the difference between **evidence** and **inference**.*
  - *First we are going to ask a question. “How do we use our face to let people know how we feel?” This is called facial expression.*
- Have students turn to their partners and make a surprised face. Have two volunteers who have different expressions come up and make the surprised face in front of the class.
- **Say:**
  - *Now we are going to make **observations**. An **observation** is a statement of what you see. Tell me what you observe about this student’s face.*
- Chart specific examples. It may be things like “their eyes are open really wide”, “their mouth is in the shape of an O”, “their eyebrows are raised”. Repeat with second student.
- **Say:**
  - *We have made some **observations**. Now let’s make an inference based on our observation. An inference is what we think might be true based on our **observations**. Based on your observations, what inference could you make about these students feeling?*
- Choose two new students to make a facial expression in front of the group. Whisper to them an emotion (e.g. angry, happy, embarrassed) and then lead the class through the same activity.
- Repeat the activity using **posture** and **gesture**.
- **Ask:** *How do we use our body **posture** and **gesture** to let people know how we feel?*

- Emphasize the difference between **observation** and **opinion**. Explain it is important to avoid expressing **opinion** as **evidence**.
- *Ask: Just because a person has their arms crossed, does it mean they are mad? Or are there other reasons they may have their arms crossed?*
- Lead students to the discovery that we can infer based on our **observations**, but they might not always be accurate.
- Explain to students that if they like or dislike the expression or gesture they have formed an **opinion** and it is not **evidence** nor is it an inference.
- Say:
  - *Now that we have made several **observations** and formed several inferences, let's have you work with a partner to make **observations** of each other as **actors** showing different emotions.*
  - *After you have made your **observation** you will need to infer what emotion the **actor** is conveying to you the audience. Everyone is going to have a turn to be the **actor** and the **observing scientist**.*
  - *Something important to remember is when you are the actor, you don't want to tell the observing scientist what emotion you are **acting** out.*

### **GUIDED PRACTICE** (*Application of knowledge, problem solving, corrective feedback*)

(15 minutes)

- Divide the students into groups of 2. Give each group the "Theatre Experiment".
- Have students take turns being the **actor** who will show the emotion with their face and body. No talking allowed.
- Have the students write down their **observations** made from closely looking at their partner who is expressing one of the emotions from their "Expression Chart."
- After the students have had time to write their **observations** of each other, put two groups together.
- Both students in the first group will be actors **acting** out an emotion for the second group.
- The second group should make **observations** and record them on their worksheet then write down which emotion they can **infer** from observing the **actors**.
- Switch groups and repeat the process.

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

(5 minutes)

- Ask:
  - *How do scientist conduct **observations**? Think about how we made our **observations**.*
  - *What is the difference between an **opinion** and **evidence**?*
  - *What do your results recorded on the Theatre Experiment #1 handout tell you about people, feelings and how feelings can be expressed to an audience?*
  - *What are the tools that an actor uses?*
  - *How can we use facial expression, body **posture** and **gesture** to create a **character**?*
- Have students respond to the following prompt in their science notebooks:
  - *How did theatre help you understand what it means to infer something based on your **observation**?*

### **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 student's as they act out the different emotions and play it back for the class to watch.

# Theatre Experiment #1

Partner Work

Observations of Body	Observations of Body	Inference from Observation
Arms are crossed.	Lips Pushed together. Eyebrows are squished together.	Based on my observations I can infer this actor is showing the emotion of being <b>Mad</b> .

## Theatre Experiment #2

Group Work

<b>Observations of Body</b>	<b>Observations of Body</b>	<b>Inference from Observation</b>
Arms are crossed.	Lips Pushed together. Eyebrows are squished together.	Based on my observations I can infer the actors are showing the emotion of being <b>Mad</b> .

# Expression Chart

## "How Do You Feel?"



Scared



Confused



Surprised



Sad



Excited



Disgusted



Proud



Angry



Sick



Happy



Very Happy



Hungry



Lost



Shy



Sleepy



Nervous



Unhappy



Very Sad



Bored



Embarrassed