UNIT: The Stage and Its Equipment

LESSON 1: Facilities Tour

OBJECTIVE: The students will demonstrate the knowledge of how to find, identify, and describe the use of the different places used by the High School drama program by finding and explaining the use of each area in groups.

*\*\*These directions are for a specific auditorium space; adaptations to facilities tour will need to be made by others for their own spaces\*\**

MATERIALS NEEDED:

* Space keys

HOOK:

After taking role, instruct the students to leave their things in their seats. We will be taking a tour of the facilities today. Everyone will follow me or the TA to each location and should stick together.

PRESENTATION:

Discussion and Checking For Understanding

In each of the following areas ask the students to identify what they can and how these areas are often used in theatrical production. Ask students to explain what they know about the equipment in those areas and how they might be used. Briefly identify and explain each of the following at the areas.

1. The classroom
	1. Light system
	2. Sound system
	3. Projector
	4. American flag
	5. Speakers
2. The auditorium
	1. Cheeks
	2. Seating area
	3. Acoustics
	4. Speakers
3. The stage
	1. Wings
	2. Apron
	3. Proscenium
	4. Fly system
	5. Lights
	6. Stage door
	7. Speakers
4. The catwalk/grid/fly loft
	1. Loading dock
	2. Blocks
	3. Spotlights
5. The scene shop
	1. Sink
	2. Lumber
	3. Tools
6. The prop room
7. The costume room
8. The balcony
	1. Spots
	2. Speakers
9. The prompt/light/sound/cry booth
	1. Prompt table
	2. Light board/computer
	3. Sound board/equalizer
	4. Storage area/gobos/gels

Throughout the tour ask in each area (and about various items) these questions:

* + - What type of work do you imagine goes on here? Have any of you used a space like this before? How?
		- Ask students to identify what they can in these areas. What do you think these are? Do any of you know what this is? What does it do?
		- Ask students how they think the listed objects are used in theatrical production. How do we use this in theatrical production? Who usually uses it?
		- At or near the end of the tour, ask the students what they were already familiar with, what they learned, and what they think they should know more about. How much of this did you already know or have already been exposed to? What did you learn on the tour? What would you like to learn more about?

CLOSURE:

Briefly review with the students the different places we went today and their importance to stagecraft.

ASSESSMENT:

This entire lesson should be used as a pre-assessment to determine what the students already know about the modern theatre structure. Ask plenty of questions in each area and take note of which students are familiar with the different aspects of stage design and terms. Take note of which terms the students seem unfamiliar with. The tour will be graded as participation points. 10 points possible. 8/10 proficiency. -2 for tardiness or repeated behavioral warning.

LESSON 2: Introduction to the Fly System

OBJECTIVE: The students will demonstrate their knowledge of fly safety by correctly locking a line.

MATERIALS NEEDED:

* Gloves (optional)
* Rope Lock
* Pipe Lock
* Fly Weight
* White Board
* Dry Erase Markers

HOOK:

Before class begins, draw a cross section of a fly system on the whiteboard. If possible, use different colors for each of the main parts of the fly system so the different parts stand out. After quickly taking roll, ask the class:

* What is this?
* Do you know any of the parts of the fly system? If so, what?
* How does this work?
* What is it used for?

Tell the students to leave their things in the classroom as we will be going onstage to have a closer look at the fly system. REMEMBER to tell students to leave any loosely hanging clothing or jewelry because it will increase the risk of injury while operating the fly system.

PRESENTATION:

1. Modeling/Instruction
	1. Demonstrate and explain to the students safety the following safety procedures.
		1. Checking a line
		2. Unlocking a line
		3. Flying in/out
		4. Loading/Unloading
2. Checking
	1. Students will explain to a partner the process for correctly checking a line, bringing a line in/out, locking a line, and loading/unloading weights/scenery/etc.
	2. Partners will list possible negative results if the fly system is not operated correctly.
3. Guided Practice
	1. Students will demonstrate how to correctly lock a line.

CLOSURE:

Explain that later in the year they may be expected to operate the fly system on their own. In order to do that, they need to prove that they know and consistently follow all safety procedures and have a knowledge of the different parts of the fly system and how it works.

ASSESSMENT:

5/5 points for demonstration of how to lock the fly. Proficiency 5/5 points.

1. Adaptations
	1. Students who do not achieve a score of 5/5 will be given the opportunity to re-take the exam.
	2. Students with disabilities may do the demonstration with another student and as a team talk through the steps as they do it.

LESSON 3: The Parts of the Fly System

OBJECTIVE: The students will demonstrate their knowledge of the fly system and how it works by passing the fly quiz with no less than 100%.

MATERIALS NEEDED:

* Fly System Drawing Handout (see Supplements)
* White Board
* Dry Erase
* Fly Quiz (see Supplements)

HOOK:

Prepare the drawing of a fly system on the board as with the previous lesson. Briefly review the safety procedures that we practiced last time. Transition into the presentation by asking them what they learned about the parts of the fly system last time. Double check to make sure any students who may have been absent the previous lesson are catching on and go over the steps with them. Then hand out the Fly System Drawing Handout.

PRESENTATION:

1. Instruction
	1. Provide the terms for the different parts of the fly system and explain what they are. As you cover the terms, include them on the drawing on the white board. Have the students fill in their worksheets based on your white board drawing. Be sure to cover each of the following:
		1. Baton
		2. Arbor
		3. Weights
		4. Loading Dock
		5. Rail
		6. Break/Lock
		7. Manila Line
		8. Steel Cable
		9. Grid
		10. Loft
		11. Loft Block
		12. Head Block
		13. Tension Block
		14. T Bar
2. Checking
	1. Ask a variety of question as you instruct about the function and purpose of each part of the system.
		1. You hang scenery, lighting instruments, curtains, etc. from a…?
		2. If the baton goes up, the arbor goes…?
		3. The big pulleys are called…?
		4. The steel cable wraps around which blocks?
		5. The rope goes around what? And attaches to what?
	2. Erase the names of the parts on the board and replace them with numbers. Then number off the students in the class with corresponding numbers.
		1. Ask the students to explain what their number is and what it does.
		2. Have the students go with you to the fly system and find the object that corresponded to their number.
	3. Instruct the students to find a partner, and with their partner find each of the parts of the fly system we discussed in the classroom and explain what they do.
	4. On the stage, review once more what they learned about fly safety.
	5. Hand out the quiz and instruct the students to take it quietly in an isolated area in the auditorium. They should stay in sight, but be at least a body’s length away from the nearest other person.

CLOSURE:

Reiterate that later in the year they may be expected to operate the fly system on their own. In order to do that, they need to prove that they know and consistently follow all safety procedures and have a knowledge of the different parts of the fly system and how it works. The fly system can be dangerous to operate, so each student is expected to get 100% on each of the formal assessments in order to operate the fly without direct supervision of the instructor.

ASSESSMENT:

11 points possible on quiz. 11/11 proficiency.

1. Possible adaptations:
	* + - 1. Students who do not score an 11 on the quiz will be given as many opportunities to re-take the quiz as needed, but they will not be allowed to use the fly system until they score 100%.
				2. Students will be given as much time as they need to finish the quiz. If they do not finish in class, they may take it home as homework.
				3. Students with reading or writing difficulties may take the quiz orally with the instructor.

LESSON 4: Fly Safety Review

OBJECTIVE: The students will demonstrate correct procedures for operation of the fly system by flying the stage legs.

MATERIALS NEEDED:

* White Board
* Dry Erase
* Gloves (optional)
* Fly Test (see Supplements)

HOOK:

With the drawing on the board again, review one last time the parts of the fly system. Make sure the class feels comfortable identifying and describing each part.

PRESENTATION:

(If needed complete the activities that were not finished the last time.)

1. Transition
	1. Take the students to the fly system again after review the material from last time.
2. Modeling/Guided Practice/Checking
	1. Review the fine points of safety covered in the first fly lesson and demonstrate how to check and unlock a fly.
	2. Demonstrate how to fly in/out.
	3. Demonstrate how to lock the fly.
	4. Allow each student the opportunity to do as you demonstrated.
3. Directions/Independent Practice
	1. The students will be given another quiz today in two parts. There is a written test (pass this out as you are giving directions) and an observation test.
		1. Observation Test/Fly Wars
			1. Call up three students and have them stand next to fly lines that are equally weighted (i.e. the upstage legs and the downstage legs).
			2. The flies should be unlocked and the batons should be raised to grid level.
			3. On my signal they should lower the curtain as quickly as they can until the curtain touches floor.
			4. Then the curtain should raised back to the grid as quickly as possible.
			5. Once the curtain cannot be raised any more the flier will lock the fly and stand next to it hands raised. The first to do this wins and may continue playing the next round.
			6. Keep in mind all of this should be done silently. If I hear a curtain flopping on the ground, a locking ring clanking on the rail, or a baton hitting the grid, that flier will receive a 5 second penalty. Any unsafe or incorrect procedure will result in a disqualification.
			7. The Fly Wars competition is the observation portion of the test. I will be watching each student to see if he/she is using correct procedures.
		2. The Written Exam
			1. This quiz should be taken while the other students are participating in the fly wars.
			2. The exam should be done individually in a place where I can see you and a body’s distance from the nearest other student.
			3. Exams should be turned into me when completed.

CLOSURE:

Discuss with the students how well they did in the Fly Wars and why or why not they enjoyed them. Ask the students what they learned to help them succeed in the activity.

ASSESSMENT:

9 points possible. 9/9 proficiency.

* + - * 1. Students who do not score an 9 on the quiz will be given as many opportunities to re-take the quiz as needed.
				2. Students will be given as much time as they need to finish the quiz. If they do not finish in class, they may take it home as homework.
				3. Students with reading or writing difficulties may take the quiz orally with the instructor.

Students will demonstrate correct procedures for operation of flies. 5 points possible. 5/5 proficiency.

* + - * 1. Students who do not achieve a score of 5/5 will be given the opportunity to re-take the exam.
				2. Students with disabilities may do the demonstration with another student and as a team talk through the steps as they do it.

LESSON 5: The Modern Stage

OBJECTIVE: Students will demonstrate their understanding of stage geography and terms by defining and locating them.

MATERIALS NEEDED:

* White Board
* Dry Erase
* Proscenium Stage Handout (see Supplements)

HOOK:

(If needed, review one last time the parts of the fly system and let students know that they can re-take the tests if they would like.) Prepare on the board before class drawings of the five basic types of stage spaces. Discuss with the students what they know about the stages and what are the differences between them.

1. Arena
2. Thrust
3. Found Space
4. Proscenium
5. Black Box

PRESENTATION:

1. Instruction/Checking
	1. Hand out the handout
	2. Ask students what they can identify on the handout.
	3. Draw the pictures from the handout on the board.
		1. Label and define the following while having the students label the same on their handouts.
			1. Proscenium Arch
			2. Proscenium opening
			3. Plaster line
			4. Wings
			5. Apron
			6. Crossover
			7. Smoke pocket
			8. Trap door
			9. Trap room
			10. Stage
			11. Cyclorama
			12. Grand Valance
			13. Grand Drape
			14. False Proscenium
			15. Teaser
			16. Tormentors
			17. Act drop
			18. Fire/safety curtain
			19. Boarders
			20. Legs
			21. Travelers
			22. Sky drop (Scrim)
			23. Box office
			24. Lobby
			25. House
			26. Auditorium
			27. Cheeks
			28. Vomitorium
			29. Control booth
			30. Prompt booth
			31. Light booth
			32. Sound booth
			33. Cry room
			34. Balcony
			35. Backstage
			36. Offstage
			37. Dressing rooms
			38. Green room
			39. Stage door
			40. Call board
			41. In
			42. Out
			43. Left
			44. Right
			45. Up
			46. Down
			47. Center
	4. Most of this should be review from prior classes or experience. In small groups of three or four, have the students explain to each other the different terms that we have covered today.
	5. After a few minutes check for understanding by playing a trivia type game where you ask a group a question and if they do not provide the correct answer, the other groups get a shot at it.
2. Transition
	1. Take the students into the auditorium.
3. Checking
	1. In their groups, continue the checking game by stating a term and having all the members of a group find and point to the designated thing. Then have someone explain what it is and what it is used for.
	2. The group with the most correct answers will receive 5 extra participation points for the day.
	3. Have the students gather on stage.
	4. Call out stage directions and have students go to the place called.

CLOSURE:

Discuss just how many terms that we went through today and why the students believe it necessary to have and know what these terms mean.

ASSESSMENT:

10 participation points possible. 8/10 proficiency. -2 for tardiness or repeated behavioral warning. An extra 5 participation points will be awarded the group with the most correct answers in the group activities.

1. Adaptations
	1. Students with disabilities should be given the chance to participate. Remember to give them plenty of time to answer specific questions or to locate something by sight.

LESSON 6: The Sound System

OBJECTIVE: The students will demonstrate their knowledge of theatrical sound systems by locating, identifying, and defining its various components.

MATERIALS NEEDED:

* White board
* Dry erase

HOOK:

This time as the class enters the room, have prepared for them only a drawing of a stick figure in one corner of the white board. Explain that this is an exact portrait of one of them and you refuse to tell them who. (If one of them says something like “Me! Me!” than that person has volunteered to be the example.)

PRESENTATION:

1. Instruction/Discussion/Checking
	1. Explain that our person here is on stage speaking, but nobody can hear. What do we do on our stage to make sure everyone on stage can be heard by large audiences?
		1. Discuss and draw the sound system. Ask questions to see what they already know and what they are capable of explaining.
			1. Transducer
			2. Mic
			3. Receiver
			4. Input
			5. Mixer
			6. Output
			7. Equalizer/Compressor
			8. Amplifier
			9. Speakers
				1. Main
				2. Backstage
				3. Auxiliaries
				4. Audience Effect
	2. Take the students to the sound booth.
		1. Explain the different uses of the mixer and the compressor/equalizer.
		2. Demonstrate the types of effect that can be done by having a student speak into a mic repeatedly and making him sound like a chipmunk, Darth Vader, etc. using the mixer.
		3. Demonstrate using the tape deck to play sound effects.
	3. Have the students locate in the auditorium the different parts of the sound system that we discussed in class.
		1. When students locate them, have the students explain the function of that particular piece of equipment within the system.

CLOSURE:

Review what we have learned so far about stage terms and the sound system. If there is time, review how to participate in Fly Wars.

ASSESSMENT:

10 participation points possible. 8/10 proficiency. -2 for tardiness or repeated behavioral warning.

1. Adaptations
	1. Students with disabilities should be given the chance to participate. Remember to give them plenty of time to answer specific questions or to locate something by sight.

LESSON 7: The Light System

OBJECTIVE: The students will demonstrate their knowledge of theatrical lighting systems by locating, identifying, and defining its various components and instruments.

MATERIALS NEEDED:

* White board
* Dry erase
* Double-Plano Convex Lens Train
* Fresnel Spotlight
* Ellipsoidal Reflector Spotlight
* Parabolic Aluminum Reflector Can
* Strip Light
* Iris Shutter
* Gobo
* Gel
* Barn Doors
* PAR Can without a lens

HOOK:

After quickly taking roll, have the TA bring turn off the overhead lights and bring up the ERS stage lights.

PRESENTATION:

1. Instruction/Discussion/Checking
	1. In a manner similar to previous lesson, explain the lighting system while asking questions to assess what they already know.
		1. Light board operator
		2. Light board
		3. Multiplexing cable
		4. Dimmer
		5. Circuit breaker
		6. Patch panel
		7. Circuit
		8. Lighting instruments
	2. Using the lighting instruments in the room discuss the function of typical stage lighting instruments.
		1. (See Materials Needed)
		2. As these are discussed, allow the students to see the instruments up close and have the TA tern on examples of what that particular type of lighting instrument can do.
	3. Once again, take the students to the auditorium and see if they can identify the various lighting instruments.
		1. Ask students why they think the lighting instruments are hung where they are on stage. What about that instrument do you think makes it ideal to be used where it is?

CLOSURE:

If time allows, once again review the previous lessons in the unit.

ASSESSMENT:

10 participation points possible. 8/10 proficiency. -2 for tardiness or repeated behavioral warning.

1. Adaptations
	1. Students with disabilities should be given the chance to participate. Remember to give them plenty of time to answer specific questions or to locate something by sight.

SUPPLEMENTS:

LESSON 8: Stage Terms Review

OBJECTIVE: The students will demonstrate their understanding of the common terms for the modern stage and its equipment through locating and defining them and passing the unit test.

MATERIALS NEEDED:

* Stage Terms and Equipment Quiz (see Supplements)
* White board
* Dry erase
* Double-Plano Convex Lens Train
* Fresnel Spotlight
* Ellipsoidal Reflector Spotlight
* Parabolic Aluminum Reflector Can
* Strip Light
* Iris Shutter
* Gobo
* Gel
* Barn Doors
* PAR Can without a lens

HOOK:

Take the students directly into the auditorium.

PRESENTATION:

1. Checking
	1. Have the students review and identify the different terms that have been discussed throughout the unit.
	2. Once again, have each student demonstrate his/her understanding of the fly system by participating in Fly Wars.
	3. Return to the classroom and review the different types of lighting instruments and accessories. Write on the board the different names of the lighting instruments.
	4. Have the students find their own places in the classroom and hand out the test.
	5. Place the lighting instruments in the same order on the floor as they are pictured on the test and allow students to come up and look at them closer if they wish.

CLOSURE:

Discuss with the class what they learned in this unit. Have the students explain why it is important for a theatrical technician to know these stage terms.

ASSESSMENT:

32 points possible. 26/32 proficiency.

1. Adaptations
	1. Students with disabilities should be given plenty of time to take the test. If they do not finish, allow them to take it home as homework.
	2. Also allow them to both see and touch the objects that are on the quiz as they take it.

SUPPLEMENTS: