



A WRINKLE IN TIME

Based on the book by Madeleine L'Engle
Adapted by James Sie

Classroom Guide Grades 6 - 8

Guide content © copyright 2017 by The Magik Theatre. Available free of charge for educational use only. May not be republished or sold without express written permission.

How to Use This Guide

This classroom guide for *A Wrinkle in Time* is designed for Texas students in Grades 6, 7 and 8. It offers activities to help you integrate a performance of *A Wrinkle in Time* into English language arts (ELA), mathematics, science, social studies, music, art, and theatre curricula.

All activities in this guide are linked to Texas Essential Knowledge and Skills (TEKS) content standards.

For students outside Texas, this guide’s ELA and math activities also are linked to Common Core standards. At the back of this guide, you will find a list of the guide activities and their related Texas and Common Core standards.

Table of Contents

Theatre

1: Discussion Questions	3
-----------------------------------	---

English Language Arts

2: Magik Must Reads	4
3: World Building	5

Mathematics

4: Look At Them Go!	6
-------------------------------	---

Science

5: Make a Tesseract	7
-------------------------------	---

Social Studies

6: Stars of Outer Space	8
-----------------------------------	---

Art

7: Create Your Own Galaxy	9
-------------------------------------	---

Music

8: If the Universe Could Sing	10
---	----

Appendix

Activity Content Standards	11
--------------------------------------	----

1: Discussion Questions

Before the Performance

A Wrinkle in Time is a stage play. What is a stage play?

- How is a play similar to a TV show or movie?
- How is it different?

Who performs the parts (roles) in a play?

- What kinds of skills do you think performers need to have to perform in plays?
- Who else works on plays? (Remember: you may not see them on stage!)

The play is based on a story called *A Wrinkle in Time*.

- Have you read *A Wrinkle in Time* as a class or by yourself?
 - Based on what you read, what do you think may happen in the play?

During the Performance

When you watch a play, you are a member of the audience. What kinds of things should you do as an audience member? Examples:

- Pay attention
- Laugh when something funny happens
- Clap if you enjoy something

What kinds of things should you *not* do as an audience member? Examples:

- Talk to your neighbor
- Use a cell phone during the performance
- Yell at the actors (unless they ask you to!)

After the Performance

What did you think of the play?

- If you read *A Wrinkle in Time* beforehand, how was the play similar to the book?
- How was it different?

Describe the performers in the play.

- What did they do to make their characters special (different from the other characters)?
- How did they use their bodies to play their characters (using voice, movement, etc.)?
- Did you see anyone else who worked on the play besides the performers on stage?

Describe the characters' costumes.

- What did each character's costume tell you about that character?
- Did any of the performers change costumes?
 - If so, why do you think they needed to change costumes?

Describe the set of the play.

- Did it have a lot of locations?
- Did it look like a place you've been to before?
- How did different lighting change how the set looked for different scenes?

Did the play have music in it?

- If so, was it only in the background, or did it help tell the story?
- What instruments did you hear in the music?

If you were going to direct *A Wrinkle in Time* how would your production be different than the play you saw by Magik?

2: Magik Must-Reads

For each of our main stage productions at The Magik Theatre, we choose a theme related to the show. Then we create a list of Magik Must-Reads on that theme.

The reading theme for *A Wrinkle in Time* is Good vs. Evil.

The Magik Must-Reads (Grade 6 - Grade 8) are:

The Lightning Thief by Rick Riordan

City of Bones by Cassandra Clare

Treasure Island by Robert Louis Stevenson

The Hunger Games by Suzanne Collins

Please note: These books may contain mature themes.

Read them as a class or let students choose two or more to read. Then use these questions for discussion or book reports:

Theme

How did the theme of Good vs. Evil show in each book? Explain.

Setting

Describe the settings of each book.

- What details can you remember?
- Were the settings similar to a place you know or a place you've visited?

How were the settings similar to each other? How were they different?

How were the settings related to the theme of Good vs. Evil? Explain.

Characters

Who were the main characters of each book?

Did any characters show up in more than one book?

Were the characters of one book similar another book's characters in any other ways?

Plot

What did the main characters of the books want most?

Did anyone or anything stand between the main characters and their goals?

Did the main characters get what they wanted? How?

How were the plots of the books similar? How were they different?

3: World Building

When creating a story based in fantasy and/or science fiction, writers often have to build their own worlds, or create their own version of our world. Observe and analyze the structure of Camazotz. Consider how Camazotz came to be. Who lives there? What is the culture of Camazotz? Using the details and skills you've observed create your own world. When you have finished creating your world, include it in a short story! Answer the questions below as you create your world:

- Is your world a planet, and island, is it our world, but your own version of it?
- What's the climate like?
- What's the name of your world? Does this name have any special meaning? Why was this name chosen?
- Who lives there? What is the culture like? Are there laws? What type of government exist in this world?
- What is the history of your world?

TITLE: _____

4: Look At Them Go!

When tesseracting our heroes travel fast. To measure the speed of an object or person mathematicians and physicists use the formula $v = d/t$. The little v is the symbol for velocity, how fast something or someone is going. Little d is the symbol for distance, how far someone or something has traveled. Little t is the symbol for time, the duration of second or hours, it takes something or someone to travel. The $/$ is the symbol indicating you should divide the information given. Answers to this equation are often written as X m/s, where X represents the answer, m is how many miles are traveled, and s is one second. s could be replaced with other units of time, while m could be replaced with other ways of measuring distance! Use the formula and information above to find the answers to the following questions.

- 1) Meg tesseracts at a distance of 25 miles in 5 seconds. What is the velocity of her tesseracting?

- 2) Calvin is attempting to tesseract. He doesn't get very far as he only travels 4 miles within two seconds. What is Calvin's velocity?

- 3) With Meg's help Charles Wallace is able to tesseract 20 miles away from home within 5 seconds. What velocity are Meg and Charles Wallace tesseracting at?

- 4) Calvin tesseracts at a distance of 50 miles in 10 seconds. Meg tesseracts at a distance of 100 miles in 20 seconds. Who is going faster?

- 5) If Meg's velocity is 150 m/s, and she is traveling for 30 seconds, how many miles has she traveled?

5: Make a Tesseract

To travel across space and time several characters use a skill called tesseracting. It is a trick done by jumping from one dimension to another. Seeing dimensions other than our own is difficult, but we can get fairly close. Follow the instructions below to build your own diagram of a tesseract.

Materials

- Hot glue gun
- 12 cotton swabs
- A bowl
- Dish soap
- Scissors (optional)

Procedure

- 1) Create a hypothesis. What do you think is going to happen when the soap interacts with the cotton swabs?
- 2) Fill the bowl with soap and set it aside.
- 3) Take the cotton of the ends of the cotton swabs. You can either pull off the cotton or cut them off with a pair of scissors, however keep in mind that if you cut the cotton off the ends, your tesseracts will be smaller.
- 4) Make two squares with the cotton swabs.
- 5) With the remaining cotton swabs connect the two squares using the hot glue gun - make sure to have the help or permission of your teacher. Let the glue dry when done. You should have made a cube.
- 6) Gently take your cube and dip it into the bowl of soap. When you take out the cube the soap should create a square bubble in the center representing the fourth dimension.
- 7) Having fun observing the tesseract and don't forget to clean up!

Follow-Up Questions

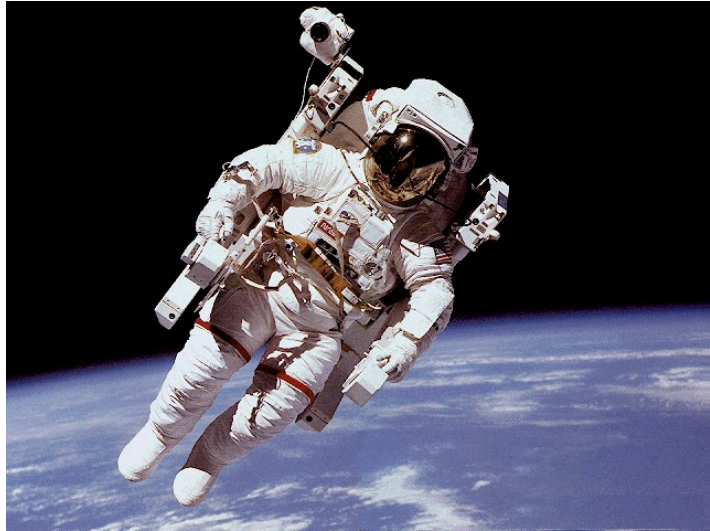
- 1) What happened when you dipped the cube in the soap?
- 2) Did you see any colors or were things just clear?
- 3) If you saw colors in the cube, do you know why that was?
- 4) As a class, discuss!

6: Stars of Outer Space

Humans have been interested in spaces for centuries, but it's only recently that we've traveled there. We have always speculated about it and studied it, with many making history while doing so, but the first person to go to space went in 1961! Write a report on one person who made history because of their space contributions. You can use whichever figure you find the most interesting. Who were they? What did they do? When you've finished your report, present it to the class!

Directions

- 1) Using books from the library or information on the internet, research several key figures who have in some way made space history. You can look for astronauts, astronomers, astrophysicists, physicists, computer scientists, mathematicians, writers, philosophers, artists, etc.
- 2) After gather interesting facts about the person of your choice, write a report about them and present your report to your class.



Follow-Up Questions

- 1) Out of all the space figures presented, who caught your interest? What was it that they did?
- 2) What were some of the professions of the chosen figures? Were they all American or did you have figures from around the world?
- 3) Did any of your classmates choose figures that worked with each other? If so, who? When?



7: Create Your Own Galaxy

During the play Meg, Calvin, and Charles Wallace travel across the universe, visiting different planets and galaxies. Our universe is infinite and there's so much astronomers and astrophysicists have yet to explore! Planets across the universe could have life and we don't even know it yet. The possibilities are endless, so why not create your own galaxy?

Materials

- Watercolors
- Paintbrush(es)
- Star stickers (optional)
- Salt
- Water
- Cup(s)
- Spray bottle (optional)
- Watercolor paper (cardstock can be used as a substitute)



Instructions

- 1) Gather your supplies. Fill two cups with water. One will be to clean your brushes and the other will be used to wet your brushes. If you have a spray bottle fill it with water as well.
- 2) Get your paper and using the spray bottle or a wet paint brush layer the paper with a coat of water to let the watercolors flow about the paper.
- 3) Now you can begin painting with any color(s) you'd like. It's your galaxy! Have fun picking and mixing colors! Don't forget to clean your brush when switching colors.
- 4) When you're done painting pour a small amount of salt in the palm of your hand. Sprinkle the salt around your galaxy, and let it dry.
- 5) Once the paint is dry shake off excess salt and decorate your galaxy with star stickers or paint your own stars!
- 6) Have fun gazing at your super stellar galaxy! (Don't forget to clean up.)

8: If the Universe Could Sing

The universe is a cold noiseless vacuum. Sound can't be heard in space, however astronomers have been able to record frequencies of different objects in space. Using these frequencies astronomers have been able to get an idea of what objects across the universe might sound like. Using your creativity and imagination, use an instrument (*anything* that be used to make sound) to compose a short song that represents what you think the universe would sound like.

While composing, consider the following...

- 1) When you think of space what do you feel?
- 2) How would you describe the emotions you feel?
- 3) How could these emotions translate into music?
- 4) What are some sounds that you think might be heard in space?
- 5) How loud or quiet would the universe be if it could sing?
- 6) Does your song have lyrics or is it just instrumental? If you think it has lyrics, write them below.

Follow-Up Questions

- 1) What instrument did you choose you use while composing? Why did you choose it?
- 2) Did you choose to use words? Why or why not?
- 3) Was your song quiet or loud? Why did you make that choice? (What about space made you think the song should be quiet/loud?)

**APPENDIX
ACTIVITY CONTENT STANDARDS**

**TEXAS
Grade 6**

<u>Activity</u>	<u>Standard(s)</u>
1	Fine Arts 117.211.b.5
2	ELA 110.18.b.3
3	ELA 110.18.b.14
4	Math 111.26.b.1.A; 111.26.b.3
5	Science 112.18.b.1
6	Soc Studies 113.18.b.20.A; 113.18.b.21. A; 113.18.b.22
7	Fine Arts 117.202.c.1-2, 4
8	Fine Arts 117.208.c. 3-4

Grade 7

<u>Activity</u>	<u>Standard(s)</u>
1	Fine Arts 117.212.b.5
2	ELA 110.19.b.3
3	ELA 110.19.b.14
4	Math 111.27.b.1.A; 111.27.b.3
5	Science 112.19.b.1
6	Soc Studies 113.19.b.20.C; 113.19.b.21.A; 113.19.b.22
7	Fine Arts 117.203.b.1-2, 4
8	Fine Arts 117.209.c.3-4

Grade 8

<u>Activity</u>	<u>Standard(s)</u>
1	Fine Arts 117.213.b.5
2	ELA 110.20.b.3
3	ELA 110.20.b.14
4	Math 111.28.b.1.A
5	Science 112.20.b.1
6	Soc Studies 113.20.b.28.A; 113.20.b.29.A; 113.20.b.30
7	Fine Arts 117.204.b.1-2, 4
8	Fine Arts 117.210.c.3-4

COMMON CORE

Grade 6

<u>Activity</u>	<u>Standard(s)</u>
2	ELA 6.L.KI&D.2
3	ELA 6.W.P&DW.4
5	Math 6.NS.2

Grade 7

<u>Activity</u>	<u>Standard(s)</u>
2	ELA 7.L.KI&D.2
3	ELA 7.W.P&DW.4
5	Math 7.NS.2

Grade 8

<u>Activity</u>	<u>Standard(s)</u>
2	ELA L.8.KI&D.2
3	ELA 8.W.P&DW.4
5	Math 8.EE.7