Miss Tizzy Unit Study

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Language Arts

Relationships – Titles

Adults are often addressed with titles. Titles typically precede one's last name. Men are addressed as Mister. It does not matter whether or not he is married. Titles for women are based on whether they are married. Unmarried women are addressed as Miss. Married women are addressed as Mrs. Both married and unmarried women have the option of being addressed as Ms. Women who have been widowed typically continue to use Mrs. In some regions of our country, particularly in the deep south, Miss is a term of endearment used with a woman's first name regardless of marital status.

In Miss Tizzy, we can infer one of two things about its main character Miss Tizzy by her name. She is either unmarried or affectionately called Miss Tizzy as a term of endearment by the neighborhood children.

Titles are a great way to introduce abbreviations and their mechanics. Point out that abbreviated titles begin with a capital letter and end with a period. You can introduce the plural form of the most commonly used titles. One would use the plurals when addressing a letter or referring to more than one person in writing. The plural forms of the titles most often used are: Mr./ Messrs., Mrs./Mesdames, Miss/Misses and Ms./Mses. or Mss.

Characterization

An author has many tools available with which to develop and provide information about a character. Descriptive words are used. Visual text or illustrations are other tools that an author can use. Visual text is when information is conveyed with images.

Explore how Miss Tizzy is described in words as well as what the reader learns

about her through the visual text. Miss Tizzy is described as peculiar in the opening paragraph. Take time to examine the title page and the following page with Miss Tizzy sitting on the ground accompanied by the children picking flowers. Have your student point out things he finds different or peculiar about Miss Tizzy. We can infer from the text and images that Miss Tizzy is eccentric based on her clothing and house. She is also sort of a free spirit who marches to the beat of her own drum because she has a colorful house with a wild yard in the midst of conservative whites houses with manicured lawns. She also wears colorful mixed patterns at the same time with high top tennis shoes.

Thesaurus

Eccentric is a great word with which to introduce a thesaurus. Explain that eccentric sometimes has a negative connotation; however, that is not the case with Miss Tizzy. She is refreshingly eccentric as evidenced by her loving free spirit and the wonderful relationships she has with the neighborhood children. Provide a children's thesaurus and have your student compile a list of synonyms for eccentric.

Creative Writing

The children make up stories and put on puppet shows for Miss Tizzy on Tuesdays. Introduce the basic elements of a story and allow your student to make up a story.

Setting: time and location in which the story takes place; tells where and when

Plot: the action of the story; there are five (5) parts: *introduction* – when the characters and setting are revealed; *rising action* - the series of events that leads to the climax of the story, usually the conflicts or struggles of the main character; *climax* – highest point of action or turning point of the story; *falling action* – occurs when the events, problems or complications in the story begin to get resolved; and *denouement* – final outcome of events

Conflict: a necessary part of the plot and involves a struggle or problem for one or more characters

Character: person, animal or imaginary creature that takes part in the story

Characterization: what tells the reader details about a character through character descriptions including physical appearance, personality, speech, behavior, actions, thoughts, feelings and interactions with other characters

Point of View: Who is telling the story?

You can assist your student by having him dictate his story as you write or type.

Simile

A simile is figurative language that creates word images of two unlike things. *Like* is often used when comparing the two unlike things. Miss Tizzy's pink house is described like a fat blossom in the middle of a street with white houses, white fences and very neat flower gardens. Her house is not really a flower; however, the author uses a flower to describe it to allow the reader to paint a visual image of color in a sea of plain white. Have your student create similes to describe Miss Tizzy's colorful house and wildflowers.

Social Studies

Relationships – Cross-generational Friendships

A generation is the number of years between the birth of parents and the birth of their children. This number of years is 30 on average for human beings. It appears that Miss Tizzy is two generations older than the neighborhood children because she looks as if she is old enough to be their grandmother. Count how many generations are living in your family as an example.

Most often people develop friendships with people of their same generation; however, sometimes friendships develop between people of different generations. Such is the case in Miss Tizzy. Miss Tizzy has taken an interest in and befriended the neighborhood children. They genuinely enjoy her friendship as does she enjoy theirs. Look for word and visual clues that demonstrate the fact that they enjoy each other. Some possibilities include the fact that she engages them in daily activities, allows them to pick flowers and lick the bowl when baking. The children provide Miss Tizzy with company and laughter. Cross-generational friendships are often wonderful because each generation can share its experiences, teach the other something, as well as learn from the other.

There are several clues that Miss Tizzy is from an older generation than the children. Help your student identify them. For example, Hiram sits across Miss Tizzy's neck like an old fur piece and is reminiscent of the 1940s when women's fur stoles were popular; Miss Tizzy has old-fashioned shoe skates; She has a feather mattress and has a doctor who makes house visits.

Bible – Proverbs 18:24 (NKJV) - *A man who has friends must himself be friendly, But there is a friend who sticks closer than a brother.*

Community Service

Serving others is a rewarding act of kindness. The children draw pictures and deliver them, along with Miss Tizzy, to neighbors. It is an easy and simple way to bring joy to those who can use a little cheering up. Look at the illustration with Hiram in the wagon. Notice the expression on the elderly woman's face. Ask your student if he can tell anything about the woman from her expression. She appears most pleased and appreciative to have received a drawing.

Have your student create a list of how he can bring joy to a neighbor through an act of service. Some ideas include: baking cookies, making a homemade beverage, sitting and chatting with an elderly person, making a welcome basket for a new neighbor, taking a plant or fresh flowers.

Bible – Galatians 5:13-14 (NKJV) - *For you, brethren, have been called to liberty; only do not use liberty as an opportunity for the flesh, but through love serve one another. For all the law is fulfilled in one word, even in this: "You shall love your neighbor as yourself."*

History -- Roller Skates

Skates have been around for a long time. The first recorded use was in London in 1743 by an unknown inventor. The first recorded inventor is Jean-Joseph Merlin of Belgium (1760). His skates were an in-line model with metal wheels and could not turn or stop. M. Petitbled of France is credited with the first patented skates (1819).

The basic design of skates has not changed since 1884 when Levant M. Richardson received a patent for the use of steel ball bearings in skate wheels. The ball

bearings helped reduce friction and increased one's speed with minimal effort. In 1863, James Leonard Plimpton of Massachusetts created quad skates on rubber cushions that allowed skaters to turn and curve. It was Plimpton's model that made skating for sport popular.

Roller skating experienced a short-lived popularity in the 1870s in Great Britain. Its greatest popularity lasted three years from 1909 to 1912. World War II and the burgeoning motion picture industry caused roller skating popularity to nearly die out until a revival in 1929.

The children and Miss Tizzy used a variety of skates. Look at the page with the illustration of Miss Tizzy leading the roller-skate train. The two basic varieties are quad and in-line. Quads have two side-by-side pairs of wheels. In-line skates have wheels aligned in a straight line. Have your student identify each type of skates.

Miss Tizzy appears to be a very competent skater as she leads the children in a roller-skate train. Skating can be used for a variety of purposes including recreation, transportation and sport/exercise. Ask your student for what purpose Miss Tizzy and the children skate. It appears they are skating for recreational purposes and are having lots of fun in the process. Take your student out for a skate or to an area roller rink and join him.

History -- Crayons

The children colored pictures on Thursdays. It appears from the illustrations that their drawings were made with crayons. Crayons are drawing utensils, usually cylinder shaped, made of either chalk (calcium carbonate) or wax. Some popular types include charcoal, clay pastels, oil pastels and grease pencils. Crayola® manufactures the most popular wax variety.

You can introduce the history of Crayola® as an interesting tidbit. In 1864, cousins Edwin Binney and C. Harold Smith formed Binney & Smith in New York. Their company was an expansion of the company owned by Binney's father. Both companies were in the pigment industry. In 1900, the cousins purchased a stone mill in Easton, Pennsylvania and started manufacturing slate pencils for children. Shortly thereafter, Binney & Smith began experimenting with making safe drawing utensils for children. They already produced a wax crayon used for marking shipping packages; however, those crayons were too toxic for children. In

1903, Binney & Smith developed a pigment and wax technique that would ultimately become Crayola® crayons. Binney's wife came up with the name Crayola® which means oily stick of color - "craie" in French means chalk + "ola" from oleaginous. Crayola® crayons are still manufactured in Easton. The first box of eight crayons (black, brown, blue, red, purple, orange, yellow and green) cost $.05 in 1903.

Math

Calendar

This is a great book to learn the days of the week. Miss Tizzy and the neighborhood children had a routine that consisted of engaging in certain activities on particular days of the week.

Point out that one week consists of seven days beginning on Sunday. Get a calendar and show an example of a week beginning on Sunday. Point out that all of the same days of the week are aligned in a column, e.g. all Tuesdays are in a vertical line. It would be appropriate to tell that each calendar year consists of 52 weeks.

Have your student recite his weekly routine to help learn the days of the week. Association helps if a student can remember on Mondays he has piano, soccer on Tuesday, and Bible study on Wednesday etc. Rather than recite his weekly routine, an older student can make two lists: make one list of his weekly routine and make another list of Miss Tizzy's and the children's weekly routine. Are there any similarities?

Days of the week are great for copy work, as well as spelling words. Use them as needed for your student.

Word Problems

1. Missy Tizzy and the children baked cookies on Monday and skated on Saturday. How many days after they baked cookies did they go skating? (5)
2. Today is [fill in day of week]. In three days it will be [answers will vary].
3. The children put on a puppet show on Tuesday. How many days was that after the first day of the week? (2)

4. The children colored pictures on Thursday. How many days were left in that week? (2)
5. Miss Tizzy and the children played dress up and had a tea party on Friday. How many days until they have another tea party on the following Friday? (7). Use a calendar to show that there are always seven days between the same day of the week, ex. from one Friday to the next is seven days.

Measurements

Miss Tizzy and the children baked cookies on Mondays. Use your favorite cookie recipe to introduce fractions and to practice measuring. A fraction is part of a whole. The parts make up a whole. Alternatively, you can make pink lemonade like the children did on Fridays. (Add 1-2 teaspoons of grenadine syrup to your favorite lemonade recipe to make pink lemonade. You may need to reduce the amount of sugar you use.)

Counting

Reciting numbers is a different skill than counting objects and requires practice for mastery. There are dozens of hats throughout Miss Tizzy that can be counted if your student needs practice with this skill.

Counting by 2s and 4s

Turn to the page on which Miss Tizzy leads the children in a roller-skate train. Have your student count the children. There are ten. Your student can count their pairs of skates by twos (2, 4, 6, 8, 10, 12, etc.). Your older student can identify the quads and count the wheels by fours (4, 8, 12, 16, 20, 24, 28, 32 etc.). Point out that skip counting is really a way to multiply and introduce the x symbol for multiplication.

Art

Patterns

A pattern is a decorative or artistic design. How many patterns can your student identify in Miss Tizzy? There are many colorful patterns: stripes (horizontal and vertical), plaid, dots, floral, paw prints and checkered. Note that Miss Tizzy combines patterns that are not typically worn together. This illustrates her eccentric qualities. Have your student create a pattern and color it.

Puppets

Puppetry is a great way for children to express their creativity. Miss Tizzy made sock puppets for the children on Tuesdays and they made up stories and put on shows for Miss Tizzy.

Sock puppets are glove puppets. Glove puppets are the most popular puppets children make when they make puppet plays on their own. Glove puppets are put on one's hand like a glove and are operated by moving the fingers about the inside. Older students can research different types of puppets, e.g. Marionette, rod, body, shadow.

Make a sock puppet with your student. Provide felt, scrap fabric, yarn, buttons, ribbon, pipe cleaners and whatever else you have on hand for decorations.

Enjoy a blast from the past (at least for the parents) and check out a *The Muppets* DVD from your library.

Science

Sound – Music

The neighborhood children and Miss Tizzy play music on Wednesdays. She leads them down the street as they play a variety of homemade instruments.

Sound is produced by something that vibrates. Vibrate means to move rapidly back and forth. You can demonstrate this by plucking a thin rubber band stretched between your thumb and pointer finger. The noise made from vibrations travels via sound waves. Sound waves travel through air, water and some solids. This means we can hear while swimming and through walls.

Experiment:

Supplies:

- 4 corn kernels
- glass jar (no lid)

plastic wrap
rubber band

1. Place plastic wrap over the top of the jar.
2. Secure the plastic wrap with the rubber band. Make sure the plastic wrap is tight.
3. Place the 4 corn kernels on the plastic wrap.
4. Stand very close to the jar and shout your name as loud as you can.

The corn kernels bounce up and down. This happens because sound waves from your mouth hit the plastic wrap and the plastic wrap vibrates. The vibrations hit the kernels.

Zoology – Birds – Cardinals

Birds are vertebrates (have backbone). All birds have five characteristics: two legs, wings, beaks, feathers and hatch from eggs. Birds are the only animals with feathers. Feathers help birds glide in flight and help keep them warm and dry. Point out that although all birds have wings, not all birds fly, e.g. penguin, ostrich, cassowary, emu, kiwi.

Cardinals are stout songbirds easily recognized by their coloring and crests. The illustration of the cardinal on Miss Tizzy's mailbox is a male as evidenced by its brilliant color. The female is far less brilliant with shades of brown. An observer can determine whether a cardinal is calm or excited (by surprise or anger) by observing its crest. A crest that lies back flat indicates it is calm and a lifted crest indicates it is experiencing excitement.

Cardinals typically build their nests relatively low to the ground, between 6-8 feet off the ground. The male cares for and helps his mate (lifetime) as she incubates the eggs. He also catches insects for the nestling.

A bird's beak is a great indicator of what it eats. The cardinal's conical beak indicates that it eats seeds. It is perfect for cracking hard-shelled seeds. *Beaks!* by Sneed B. Collard III is a wonderful introduction to bird beaks.

Bible – Birds are a great reminder of our value to God and how much He loves and cares for us.

Matthew 6:26 (NKJV) - *Look at the birds of the air, for they neither sow nor reap nor gather into barns; yet your heavenly Father feeds them. Are you not of more value than they?*

Botany – Plants and Flowers

Botany is the study of plants. A scientist who studies plants is a *botanist*. Flowers are important parts of plants. A flower's job is to make seeds for reproduction. Other parts of plants include: stems, leaves and roots. Each part has a specific role.

Stems carry food via tiny tubes through which water and food travel from the roots. The food is delivered to the leaves and flowers. Stems also serve as support for plants and come in a variety of heights, sizes and textures.

Leaves are like little food factories. A plant's food is produced in its leaves. A plant creates food in a process known as *photosynthesis*. Photosynthesis is the process by which plant cells use energy from the sun to mix carbon dioxide, water and minerals to make food for plant growth. Oxygen is released into the air as a result. Have your student draw a diagram of photosynthesis after you have explained the process or make a recipe card for photosynthesis.

Roots have two main jobs. First, roots help stabilize plants by holding the plant in the ground. Second, roots are like highways. They carry minerals and water from the soil to all parts of the plant. Roots also hold soil in place to keep it from eroding or washing away in a rainstorm.

Wildflowers and Geraniums

Observe the title page and the following two pages. Miss Tizzy's yard is full of wildflowers. Wildflowers grow without cultivation on their own. Wildflowers should not be removed from their native settings as to avoid extinction. Note that Miss Tizzy's wildflowers are not in their native surroundings.

In addition to wildflowers, Miss Tizzy maintains a box garden of red geraniums. Observe the page with the children picking flowers to see the box garden. Geraniums are relatively easy to grow annuals. The lifecycle of an annual is completed in one growing season. It must be replanted each year.

Geraniums grow well in containers, beds, borders as well as window and hanging boxes. They even make great houseplants. They enjoy lots of sun and prefer temperatures below seventy degrees. They can be grown from seeds or cuttings. Your student can learn to identify them by their scalloped leaves that are velvety on top and their 5-petaled flowers. They come in a variety of colors including red, white, pink, salmon, orange, purple and bi-colors. They are wonderful flowers to use if you want to do some dissecting and explore the parts of a flower (petal, stem, stigma, style, ovary, ovule, receptacle, anther, filament, sepal). Check your library for non-fiction juvenile titles on flowers. Here are a few: ***Flowers*** by Vrjaya Bodach, ***Flowers*** by John Farndon and ***Flowers*** by Elaine Pascoe.

Your older student may be interested in discussing the difference between *annuals*, *perennials* and *biennials*. Annuals, perennials and biennials refer to the life cycle of a flower.

Annual – Completes its life cycle in one growing season and needs to be replanted every spring

Perennial – Lives for 3 or more seasons; however, it may not be mature enough to blossom in its first season

Biennial - Grows its leaves, stems and roots during the first growing season; It lives during winter and blooms during the second growing season

Simple Machines - Wheels

All roller skates have wheels. Wheels are simple machines. A simple machine is a device that helps do work.

Make a simple wheel model using cardboard and a pencil. Cut a circle out of

cardboard and push a pencil through the center of the circle. The pencil is an axle. Have your student turn the wheel. He will notice that the wheel does not turn easily. It does not turn easily because it rubs against the pencil. The rub is friction. This is similar to the wheels used on beginner preschool skates. The wheels on these skates are slower because they rub against the axle. The wheels in non-beginner skates turn much faster. They turn faster because they have very little friction. Adding ball bearings further reduces the friction.

Ball bearings are tiny steel balls that fit between the axle and wheel. They prevent the wheel from rubbing against the axle. Rather, the wheel turns easily as it touches the bearings. Ball bearings come in a wide variety of sizes and are used in wheels for bicycles, cars, locomotives and airplanes.

Recycling

To recycle entails saving waste materials or objects and using them to make new materials or to use them for a purpose other than their original purpose. Miss Tizzy allows the children to pick flowers from her yard. They put them in clean glass jelly jars. The jelly jars are used as vases. This is an example of recycling. Point out that the jars are being used for a second purpose. Ask your student whether he can find another object in Miss Tizzy that was recycled. Point out that the socks used to make sock puppets were recycled. Discuss ways in which your family recycles. Also, discuss the economical (ex. saves money, creates jobs) and environmental benefits (ex. reduces waste, conserves energy and natural resources, decreases pollution) of recycling.

Nighttime

Miss Tizzy and the children sit under the stars on Sunday nights. We experience darkness at nighttime as a result of the earth's rotation. The earth makes a complete rotation every 24 hours. That is why we have 24 hours in one day. Point out that the earth's rotation is different from its orbit around the sun. Have your student demonstrate the earth's rotation by standing in one spot and turning around. Have him demonstrate orbiting by walking around a large object like a table.

Light from the sun is only on one-half of the rotating earth during the day. The

other one-half of earth is dark during this time because it is in the earth's shadow. The dark half is night. As the earth spins during its rotation, it moves through the light into darkness and back to the light. This continual cycle creates day and night.

Water Cycle – Rain

Miss Tizzy and the children deliver handmade drawings on Thursdays. The illustration shows a rainy Thursday. Rain is a drop of water that falls from clouds. It is a type of precipitation, as are snow, sleet and hail. Precipitation is part of the water cycle by which the earth and air continually exchange water with each other. It is an ongoing cycle consisting of four stages: *evaporation, condensation, precipitation* and *collection*.

Evaporation: The sun evaporates water from the earth's oceans, lakes and ponds. (Plants also give off water into the air through a process known as transpiration.)

Condensation: Condensation occurs when rising warm moist air begins to cool and causes clouds to form.

Precipitation: Precipitation forms when these clouds meet colder air. After precipitation falls to the earth evaporation begins all over again.

Fun trivia: Contrary to popular belief, raindrops are not shaped like tear drops. Rather, they are perfectly round.

Stars

Miss Tizzy and the children sit in her backyard and look at the stars on Saturdays.

A star is a huge ball of glowing gas, mostly hydrogen and helium, which appears as a bright light in the night sky. Earth's closest star is the sun and it is 90,000,000 miles away. Distance from the earth affects how bright a star appears. Distance may make a very bright star appear dim. Stars vary in size. Very small stars are dwarf stars and the largest stars are giant stars.

The brightness of a star is determined by how much energy is released by its inside. Hydrogen is changed to helium inside stars, and the energy released as a result is what causes stars to glow.

Stargazing is a favorite pastime for many. Scientists who study the stars are *astronomers*. Ancient astronomers noticed patterns among the stars and named them after animals (ex. Leo the Lion, Taurus the Bull) or mythological Greek figures (ex. Orion). Modern astronomers recognize 88 constellations.

A fun and gentle introduction to the night sky and constellations is ***Find the Constellations*** by H.A. Rey.

Bible – Just as the night sky is never completely dark, we are reminded that there is no darkness in God. God is light. Thankfully, as followers of Christ we can abide in His marvelous light because we have been called out of darkness. He tells us that He is our Morning Star. What great reminders when we marvel at the night sky!

Here are some Bible verses:

I Peter 2:9 (NKJV) - *But you are a chosen generation, a royal priesthood, a holy nation, His own special people, that you may proclaim the praises of Him who called you out of darkness into His marvelous light*

I John 1:5 (NKJV) - *This is the message which we have heard from Him and declare to you, that God is light and in Him is no darkness at all*

Revelation 22:16 (NKJV) - "*I, Jesus, have sent My angel to testify to you these things in the churches. I am the Root and the Offspring of David, the Bright and Morning Star*."

Moon

Miss Tizzy sang songs about the moon on Sunday nights as the children lay under the stars. Turn to the illustration of Miss Tizzy sitting under the tree and the children on their quilts. Point out the full moon. Compare it to the crescent moon on the next to the last illustration.

The earth's moon is a *satellite* which means that it revolves around the earth just as the earth revolves or orbits around the sun. The moon illuminates the night sky; however, it has no light of its own. Rather, it reflects light from the sun. The sun always shines on some part of the moon and the light we see on earth from the moon is a reflection of the sun's light.

You have already noted illustrations of both a full and crescent moon in Miss Tizzy. These illustrations provide a great opportunity to discuss the phases of the moon and why it appears to be different shapes. The shape or size of the moon never changes. It appears to change because the only part of the moon that is visible is the part that reflects light from the sun. The part of the moon that reflects light changes. These changes are known as *phases*. The moon has four phases:

New moon – The moon is between the earth and sun. It appears totally dark. We do not see it because the night side of the moon is facing the earth and the dayside is reflecting light back to the sun.

Crescent moon – As the moon revolves around the earth and is no longer between the sun and earth, a small sliver of the moon reflects the light.

Quarter moon – The moon continues to revolve until a semi-circle of light reflects off its surface.

Full moon – When the earth is between the moon and sun, the entire side of the moon reflects the sun's light.

As the moon continues to revolve or orbit, the phases are reversed. This is a very brief introduction of the moon's phases.

<u>Bible</u> – The stars and moon are evidence of God's creative and perfect work.

Genesis 1: 16-19 (NKJV) - *Then God made two great lights: the greater light to rule the day, and the lesser light to rule the night. He made the stars also. God set them*

in the firmament of the heavens to give light on the earth, and to rule over the day and over the night, and to divide the light from the darkness. And God saw that it was good. So the evening and the morning were the fourth day.

Seasons

The Sunday where Miss Tizzy and the children sit in her backyard takes place in the summer. Introduce or review, as appropriate, the four seasons: winter, spring, summer, fall. You can discuss the characteristics of each. Point out to your older student that the seasons when written are not capitalized, unless they begin a sentence or are part of a title.

Our change in seasons is caused by the earth's orbit around the sun and the tilt of the earth's axis. Make sure that your student understands that the earth rotates on its axis and orbits the sun simultaneously.

People in the northern hemisphere (part of the earth north of the equator), like the United States, experience summer when the northern hemisphere is tilted toward the sun. They experience winter when the northern hemisphere is tilted away from the sun.