**What is a Tree?**

**Materials**

* The Giving Tree by Shel Silverstein
* Computer with Internet
* ELMO
* Chart Paper
* The Tree Book for Kids and Their Grown Ups by Gina Ingoglia

**Anticipatory Set (10 Minutes)**

* Play the Youtube video of Shel Silverstein reading the book, *The Giving Tree.*

**Essential Questions**

* What do trees give us?
* What do we give trees?

**Students will be able to:**

Recognize reasons why trees and forests are valued. Students will become aware that forests serve as habitat for a variety of living things and are important to human needs for recreation, for raw materials and for a life-supporting environment.

**GLCEs:**

* E.ES.03.51 Describe ways humans are dependent on the natural environment (forests, water, clean air, Earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry).
* E.ES.03.52 Describe helpful or harmful effects of humans on the environment (garbage, habitat destruction, land management, renewable, and non-renewable resources).

**Body (15 Minutes)**

* What was the first way that the boy uses the tree? Have you or anyone you know ever used a tree this way? What other ways did the boy use the tree? Let students relate to his/her life experiences.
* Create a double bubble map, comparing and contrasting what humans give trees and what trees give humans! In the middle, include life, shelter and food.

Humans

Trees

* Use the book, *The Tree Book for Kids and Their Grown Ups* to share with the students information about trees. Try to include things on the bubble map that interest them. Revisit the bubble map throughout the unit!
* Place the text on the ELMO and have students take turns reading different pages. Utilize the table of contents and index to find the facts!

**Closing/Assessment**

In their ELA notebook, have each student write down two facts that mean something to them. Use the writing and the discussions to evaluate what area students need more clarification or more information.

**What a Dream—Children’s Book Lesson**

**Materials**

* Just A Dream
* A copy of the 4x4 inches photograph in *Just a Dream* where the boy is sleeping in the trees, enlarged.
* Students’ ELA Notebook
* Chart Paper (To create a web)

**Anticipatory Set**

* Read the first six pages of *Just a Dream by Chris Van Allsburg*. Have the students write in their ELA notebook. Use the prompt: Write about or draw yourself living in the future. Expect students to use ideas from the 4th page of the text: tiny airplanes, robots, machines, etc.
* As a class start a web of everything that makes up the future.

**Essential Questions**

* How does my community depend on the natural environment?
* What is the problem?
* How do we know there is a problem?
* What is being done to conserve our natural environment and what can be done?

**GLCEs:**

* E.ES.03.51 Describe ways humans are dependent on the natural environment (forests, water, clean air, Earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories, and industry).
* E.ES.03.52 Describe helpful or harmful effects of humans on the environment (garbage, habitat destruction, land management, renewable, and non-renewable resources).
* 3 – H3.0.1 Identify questions historians ask in examining the past in Michigan (e.g., What happened? When did it happen? Who was involved? How and why did it happen?)

**Body—This lesson can be completed in two or three classes. The anticipatory set can be used for one class or combined with the reading. The questions for after reading, can be another class and combined with the assessment.**

* **Continue reading the story**
	+ While reading, do not show the expanded view of pictures. (Before the boy falls asleep a small 4x4 inches photograph depicts a lush environment, when you turn the page, a two page spread photograph depicts the destruction).
* **Ask the following questions during the reading**
	+ How did Walter’s feeling about planting a tree change from the beginning of the story to the end?
	+ Why should we plant trees? How are they helpful for our planet?
	+ Where did Walter end up in his second dream? How was this dream different from the first? *Habitat Destruction Examples:*Walter saw men cutting down trees for toothpicks.A duck landed on Walter’s bed because it couldn’t find the pond where it used to land.Walter stood on the edge of the Grand Canyon and couldn’t see it because of smog.
* **Questions to ask after reading:**
	+ What actions can we take so that our future doesn’t turn out like Walter’s first dream?
	+ What does our present look like? What kind of future did you write or draw about? Would you change your picture and what would you add?

**Closing/Assessment**

* Flip through the book and look at the large photographs in the text. Discuss what you see in the pictures. Use the discussion and their ELA notebooks’ as tools for assessment. Are the students able to address the essential questions? Continue to add to the web if appropriate.

**Extension Activity**

* Have the students interview an adult community member. Discuss what qualifications a community member must have. Are my parent’s members of the community? What about the principal that lives outside of town? Come up with a list of interview questions as a whole class. Focus on comparing and contrasting the past with the future or the now. Guide the students to ask questions related to the essential questions. How do you rely on the land now versus when you were a kid? Have the students share their findings with the class.
* Example Questions: What memories do you have of trees in our local community? What did they look like? How did those trees compare to the trees we have now? How did your family use trees? What attitudes did people have about trees then compared to attitudes now?

**Planting Trees (Community Mapping)**

**Materials**

* White Paper
* Materials for making a model (students can bring in materials from outside of class).
* Web of Life Cards

**Anticipatory Set**

Use the cards from the Interdependence—Web of Life Lesson and have students pick out three or four that matter to them most and make them feel happy in their community. Go outside and gather under a tree at the back of the playground.

**Essential Questions**

What is the purpose of a map?

How can maps be used as tools?

What is progress? What does it look like on a map?

**GLCEs**

3 – P4.2.1 Develop and implement an action plan and know how, when, and where to address or inform others about a public issue.

3 – P4.2.2 Participate in projects to help or inform others

**Body**

* Now, that the students know the working mechanisms of a community they will be able to map their surroundings paying attention to detail. At this age, students will be able to map panoramic views and sketches.
* First, as a group talk about what you will include in map. What is important to you, but what makes the map useful? What is the purpose of this map? If we want to plant more trees what does that say about our playground now? If there aren’t many trees now how will we show this? Should we include the school as a point of reference?
* Share the maps inside with the rest of the class. Make a list of the qualities that make a good map.
* Introduce the idea of planting trees and how we could use the map as a tool to convince members of our community that we needed more trees in the area. What have we learned so far? What do trees provide us with? How can we emphasize that there aren’t enough trees. What if we expanded our scale?
* Tell the students that now we will produce a model using whatever we can find to make a map of our school and neighborhood.
* Go on a walk with the class around the perimeter of the school and through the local neighborhood. Divide the class into teams who will be responsible for taking note of different features of the walk (related to the interdependence lesson).
* Encourage the students to bring in materials they find or from outside the classroom to add to the model. Take pictures of the model so that they can watch the area progress.
* Show the pictures in a slide-show. What do you notice as we add more to our model? Should we expand the size of the model? But what about the size of our buildings, we would have to change those too? So, why are we running out of space? Do we have room for more trees? But we don’t have many!
* After the model is completed, discuss what could be. If we had the resources and funding where would you like to plant a tree? Or two?
* Add the trees to the model. How does it make you feel? How do the trees visually affect the model? Does it look better or worse?
* Take pictures to document the progress of what *ought* to be.
* Using a thinking map create a proposal for planting a tree(s) in the surrounding area. Include why, what and where. Use informational text to defend your proposal.
	+ *Tree Planting and Tree Care Guide by the National Wildlife Federation*
	+ *Wayne County Conservation District—Spring 2012 Tree & Shrub & Native Wildflower Sale*

**Closing/Assessment**

Distribute a proposal flyer asking that trees be planted in the neighborhood. Students must be able to defend the proposal! Include on the flyer pictures of the community model, what it is now and what it ought to be, or could be.

Each child will be assessed on their individual map and contribution to the model. The students will also be assessed based on their discussion and contribution to the flyer. Individual conferences may be needed to discuss the essential questions and big concepts with individual students.

**Web of Life (CCES Adaptation: Teaching Interdependence)**

**Materials**

* Notecards Cards
* String
* Journal

**Students will be able to:**

Describe simple connections between the plants and animals of an ecosystem.

Predict changes to an ecosystem that have been caused by human behavior.

Tell how to choose behaviors that help protect natural resources.

**Anticipatory Set (15 minutes)**

Go on a walk outside. Notice the trees and everything around it. Each child will be holding a notecard. Start naming off the living organisms and animals. Ask that students call out if they like a particular animal and write it on their card. If someone has already called it you need to write down something else. Close your eyes and imagine what comes out at night or the early morning. The thing you are naming doesn’t have to be present! Once you have created 30 cards start the lesson with a ball of string.

**Essential Questions**

What makes a web stronger or weaker?

How do we affect the web?

**GLCEs**

L.OL.03.41 Classify plants on the basis of observable physical characteristics (roots, leaves, stems and ﬂowers).

**Body (20 Minutes)**

* The teacher with a sun card will create a circle, holding a ball of yarn.
* The teacher tosses the ball of string to someone else in the circle, while holding onto the end of the yarn.
* The person who catches the ball tries to explain how the organism on his or her card interacts with the sun. (Anyone can help out).
* Next, the person who caught the ball holds onto the string and tosses the ball to a third person.
* The third person explains how the organism on his or her card interacts with the second person's organism. If the player gets stuck, anyone in the game can make a guess.
* The game continues until everyone has had a turn at catching the string.
* As each student makes a connection, a web or system is formed. The string is now complex and tangled—everyone in the group is connected to everyone else.
* Ask the trees to drop their string. What happens? Students see the web weakens/collapses.
* How could we make the web stronger? What if we added more connections? Have the people holding the tree cards drop/pick up the string again.
* We see the web can get stronger and more resilient or weaker and more fragile. What does this tell us about the importance of each member in the web?
* The tangled ball of string has formed a web, just like the complicated web of life in an ecosystem. The web shows how closely organisms in an ecosystem interact with one another. Anything that happens to part of the web has an effect on the whole system.

**Closing/Assessment (10 Minutes)**

Have students write in their journal about how humans effect of the web. Why do our actions matter? What if we wipe out all the trees? How does this affect the web? What can we do to make sure the web gets stronger?