

# The Hugging Tree: A Story About Resilience

A Teacher's Classroom Guide

Created by Jill Neimark

# Copyright 2015

Available free of charge for educational use only; may not be published or sold without express written permission.

Based on the picture book written by Jill Neimark and illustrated by Nicole Wong, and published by Magination Press, an imprint of the American Psychological Association.

For more information about Magination Press or to order a copy of the book, please go to <a href="https://www.apa.org/pubs/magination">www.apa.org/pubs/magination</a>.

## How to Use This Guide

This classroom guide for *The Hugging Tree* is designed for students from 4 through 8 years old. Educators can choose from a wide range of activities to help them integrate *The Hugging Tree* into English language arts (ELA), mathematics, science, and social studies curricula. All activities follow the requirements of the Common Core. Art, experiential learning, and psychology are used as teaching tools.

## Reading Comprehension

## **K-2 Constructed Response Questions**

- 1. Look at the cover. What do you think this book will be about, and why? Now, read the book together.
- 2. What is the setting of the story?
- 3. What is the main problem the tree faces in the story?
- 4. What happens when winter comes? What happens when the storm rips the tree's roots?
- 5. Where does the tree turn for help? Who helps the tree—the sun, the moon, the ocean, the cliff?
- 6. a. The little boy chose to help the tree. What did the little boy feel when he first saw the tree in trouble?
  - b. When we see someone in trouble, it makes us want to help them. When we help them, we feel good about it. Let's talk about these feelings.
- 7. In the beginning of the story, the tree is a little seed. But the tree grows, bit by bit, just like you do. When the story ends, the tree is big and can hug and help others. At what parts of the book did you feel closest to the tree? How did the tree remind you of yourself?
- 8. What happens at the end of the story? What is the most important thing you learned from the story?

## **3-6 Constructed Response Questions**

- 1. a. How does the author make nature come alive? Give examples from the story to support your answer.
  - b. Talk about times you felt connected to nature, and embraced by nature.
- 2. a. How would you describe the boy? Is he kind, giving, steadfast, patient? Why does the boy keep coming back to the tree?
  - b. Do you think the boy loves the tree? How do we show love? Give examples from the story support your answer.
- 3. When times are hard and we face challenges, we need to be strong. Can we be strong alone, or do we need help from others? How do we seek help from others, and why do they help us?

## K-2 Answer Key

- 1. The cover of the book shows a big beautiful tree and a happy boy. The story is about the relationship between them.
- 2. The setting of the story is on top of a big cliff by the sea. The setting is important to the story because it is a place where a tree normally wouldn't grow.
- 3. The little tree is growing in a harsh place, and is not protected by other trees in a forest. Yet she has faith and strength. She never gives up. How can it help us to be like the tree?
- 4. When winter comes, the ice and storms break the tree's branches and roots, and she is afraid she will be torn from the cliff.
- 5. When she is lonely or in trouble, she reaches out for help to the sun, the moon, the sea, the cliff, and the little boy.
- 6. The little boy is kind and caring. When he sees the tree in trouble, and touches her broken roots, his heart is touched. He wants to help her. He knows he can help her, and as he helps her grow, he finds she helps him back. She shades him with her branches and leaves. He can rest under her shade and dream. It makes him feel good to help her, and he feels good when she gives back to him. This is how we all get through hard times, and turn them into good times. This is how we reach out to others, to help them be strong.
- 7. When we are born, we are like the little seed of the tree. We grow, an inch, a foot, then two. As we grow, we face challenges from life. But as we grow and learn to overcome difficulties, and learn to trust others, we grow into strong individuals who can help and give back to others.
- 8. At the end of the story, the tree has made it through hard times. She is big and beautiful and can shelter many people, who come to enjoy themselves, picnic, or just sit and dream. The most important thing to learn from the story is that we all face challenges, and we all can get through them by being strong, and reaching out to others for help.

## 3-6 Answer Key

- 1. The author personifies nature by giving it human emotions and actions. She also gives items in nature a voice. She describes the ocean as hugging the rocky shore and has it talk to the tree. The sun kisses the tree, and the moon and rocky shore talk to the tree.
  - b. You may have felt connected to nature if you walked in the woods, went to the beach, went on a camping trip, or watched a butterfly.
- 2. a. The boy is naturally kind. When he sees the tree needs help, he promises to help her. And he is persistent. He keeps at his task, coming back each day to help the tree. He develops intimacy with the tree, and years later, he still visits her and enjoys her presence.
  - b. The boy shows love for the tree by developing a deep relationship with her over a long period of time. We show love by our daily acts of kindness, and by demonstrating true friendship over many years.
- 3. We can be strong alone and we need help from others. Both are true. We can draw on our inner strength, our faith, our hope, and our belief that we can overcome hard times. But we also need the help and love of others. We can reach out to others for help and lean on them, and their help can make all the difference in our ability to overcome obstacles.

## **Enrichment**

## **Social Studies and Psychology Connection**

- 1. As a class, discuss how the hugging tree was resilient. What obstacles did she have to overcome? How did she overcome those obstacles? What obstacles do you face in life? Have you ever been bullied or teased by someone (your brothers, sisters, or classmates)? How did you feel? Were you able to talk to your parents about it? Your friends?
- 2. Do you know how to calm your emotions through mindfulness exercises? Here are some mindfulness exercises:
  - A. Try the **breathing buddy** exercise here. Each student takes a stuffed animal to be their breathing buddy, and then lies down on their back with their buddy on their belly. They focus their attention on the rise and fall of the stuffed animal as they breathe in and out.

## https://www.youtube.com/watch?v=scqFHGI\_nZE

- B. Take a **mindfulness** walk as a class. Walk around the schoolyard, and for two minutes of the walk be completely silent and listen to all the sounds we can hear—birds, cars, squirrels, the wind. Just pay attention, and notice that you are feeling calmer. As part of the mindfulness walk, think of the hugging tree and nature. Notice the trees around you. Notice the beauty around you, and talk about how appreciating nature and beauty can help us calm down and feel good even when we are upset.
- C. Gratitude. The hugging tree appreciated everything around her, even when she was having hard times. She loved the sun, the moon, the sea, the loons, and finally the little boy. Think of one thing you are really grateful for. For example, it could be your best friend, it could be your favorite movie, or it could be your pet.

- 3. **Kindness**. In the story, the little boy helps the hugging tree heal and grow. When we are kind to others, we feel good about ourselves. Think of some times you helped someone, and how it made you feel. Think of one act of kindness you will do when you get home tonight. Help with a household task, pick up trash in the neighborhood, or give someone at home a hug or a cuddle or a rub.
- 4. Perseverance. The hugging tree perseveres and doesn't give up, no matter how tough life gets. Persevering means we don't give up even when it's hard. We may get discouraged, but we keep going. Knowing how to persevere is an important life skill. We learn perseverance by starting small. Have each child think of a fun small goal they could accomplish this week. It could be helping mom and dad prepare a meal, brushing the cat, or picking up trash in the neighborhood. Then ask, "Who can help me with this?" Like the hugging tree, we all need help.
- 5. Share with the students that you are going to be learning about the obstacles some famous people overcame to be successful. Share the obstacles found on pages 25-27 in the appendix with students one at a time. After each obstacle, invite students to share:
  - What obstacle does this person face?
  - What might a resilient person do?
  - What might a person who isn't resilient do?

After the students have shared, read the success included after each obstacle. Have students identify what the real person chose to do.

6. Then, invite your students to measure their personal resiliency with one of these quizzes:

http://pbskids.org/arthur/health/resilience/quiz.html

http://www.embracethefuture.org.au/kids/index.htm

7. Re-enforce the concept of thinking positively by challenging your students to pop the bad thoughts while keeping the good thoughts:

http://www.embracethefuture.org.au/kids/balloon\_game.html

8. Have your students read the article about a real-life hugging tree on p. 28 in the appendix. Ask: How did a real-life hugging tree give to the people in the town? And ask: How did the people in the town care for the real-life hugging tree? Discuss how caring for and nurturing others helps us to be resilient.

## **Physical Connection**

Have your students participate in a group juggling activity to emphasize working together to deal with stress, managing multiple things at the same time, and making and learning from mistakes.

Preparation: You will need 8 to 10 objects that are easy to throw and catch.

#### Game Instructions:

1. Ask your students to stand in a circle. Explain that you are going to throw an object to someone in the circle. Then, that person will throw the object to someone else in the circle who has not caught the object yet. Tell the students that they need to remember who they got the object from and who they throw it to. The object should be thrown and caught until everyone in the circle has participated and the object is thrown back to you.

Notes: You may want people who have not caught the object to hold their hands out in front of them so students can tell who is left to throw to. You will also want to set expectations for how the objects will be thrown and caught by demonstrating an underhand throw while calling the name of the person you are throwing to.

2. Ask the students to name something in their life that they have to juggle or take care of every day. Write one of the answers on a piece of tape and stick it on one of the objects. Write other answers on tape and stick them on the other objects you have collected. Answers may include: school, homework, chores, friends, sports, family, etc.

- 3. Repeat the throwing and catching with one object. This time name the object before you begin. (i.e.: "Let's juggle homework.") After the object makes it back to you, discuss with the class how they felt juggling one object. Was it easy, hard, fun, boring?
- 4. Repeat the throwing and catching but this time use two objects with a slight pause in between the first and second. Name the objects as you add them to the circle. (i.e.: "Let's juggle homework and chores.") After the object makes it back to you, discuss with the class how they felt juggling two objects.
- 5. Repeat the throwing and catching, but this time use four objects. Name the objects as you add them and discuss how it felt to juggle four things.
- 6. Continue in this way adding two more objects to the circle each time, naming the objects, and discussing how it felt. As objects begin to be dropped, pause at the end of a round and share with the class that dropping an object is like making a mistake. How did you react if you dropped an object? How did others react? What is the best strategy for handling this mistake? Share that people make mistakes, but resilient people pick up and keep on going. Resilient people also know when to ask for help. Brainstorm how they could help themselves and each other to juggle so many objects and not drop them.

This game was adapted from a game by Edgework Consulting. The full game description and alternative ways for playing can be viewed here on pages 12–14:

http://www.edgeworkconsulting.com/assets/16-Games-That-Promote-Conversations-About-Resilience12.10website2013.pdf

#### **Nature: Trees and Resilience**

This is a description of nine different famous trees that highlight different aspects of resilience. Students can learn about trees around the world while gaining insights into resilience qualities.

## **Tremendous Trees**

The Hugging Tree was tremendous for its resilience. Here are ten other trees that are tremendous for resilience in their own ways.

## 1. Lone Cypress in Monterey

Whipped by the cold Pacific Ocean winds, lashed by waves, wreathed in fog, the world-famous Lone Cypress on the Monterey Peninsula in California inspires visitors the world over. Sometime in the early 1800s, a Monterey cypress seedling took root on a granite cliff on the Monterey Peninsula. It symbolizes persistence, beauty, and grace amid adversity. **How does the Lone Cypress show strength and resilience?** 

\_\_\_\_\_



#### 2. General Sherman

Giant Sequoias grow in Sierra Nevada, California, and are the world's biggest trees. The biggest one is nicknamed General Sherman, and lives in the Sequoia National Park. It is 275 feet tall and weighs over 6000 tons. General Sherman is approximately 2,200 years old—and each year, the tree adds enough wood to make a regular 60-foot tall tree. Patience is part of resilience. We reach our goals over time. Discuss how long it takes a Sequoia to become a giant and how that shows resilience.

## 3. Chapel-Oak

The Chêne-Chapelle (Chapel-Oak) of Allouville-Bellefosse began with a hollow in a tree made by a lightning bolt, and today it is the most famous tree in France. It is an oak that is actually both a tree and a chapel. In 1669, a chapel was built in the tree hollow, and since then a staircase climbing the outside has been added. Today, poles and cables support the aging tree, and wooden shingles cover spots where bark has fallen away. The little boy helped the Hugging Tree. Reaching out for help from others is part of resilience. Here, people built a chapel in the tree so they could appreciate tree. How does the Chapel-Oak "hug" people with its tree hollow? How do people feel when they sit in the hollow? And



how do the poles and cables that people built to help the tree remind you of the boy helping the hugging tree?

\_\_\_\_\_

#### 4. The Trembling Giant

The Trembling Giant is the name for a grove of aspen trees that are actually a colony of one single tree called Quaking Aspen. All of the trees are really stems. They are all identical clones of each other, and part of a single living organism with an enormous underground root system. The Trembling Giant has 47,000 "stems" or trees growing on 107 acres of land. Altogether it weighs 6,600 tons,



making it the heaviest known organism on earth. It may be 80,000 years old. At the end of *The Hugging Tree*, people came to sit under and near the tree each day. Community and sharing is part of resilience. How does a grove of aspen trees all living together show community and sharing? 47,000 trees grow together in one place. Do they help protect each other from storms and winds? How do they do that? Why is community important to being strong?

## 5. Banyan Tree



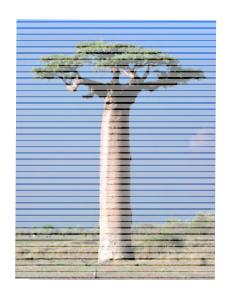
The Banyan tree is the national tree of India. It has a huge canopy and its roots grow in the air, running from the tree branches right to the ground. One Banyan tree, planted in 288 BC, is the oldest living human-planted tree in the world! Part of resilience is planting seeds, having goals, and nurturing them. Humans planted the seed of the Banyan tree thousands of years

ago, and here it is today, the oldest living human-planted tree in the world. How does the tree show resilience, and how do you think planting a seed and watching it grow into a tree teaches us about resilience?

\_\_\_\_\_

#### 6. Baobab

The amazing baobab lives in Madagascar, Africa and in Australia. It can grow to 100 feet tall and 35 feet wide. Its swollen trunk can store as much as 31,700 gallons of water to endure harsh drought conditions. Part of resilience is learning to get through tough times. Sometimes we need to plan ahead. The Baobab tree stores over 30,000 gallons of water inside its trunk, so that it can survive when there is no rain to drink and no water for its thirsty roots. How does planning ahead to get you through tough times show resilience?



\_\_\_\_\_

#### 7. The Tree That Owns Itself

In Athens, Georgia, there is a tree that actually owns itself. Legend has it that the tree, a

white oak, was given ownership of itself and the surrounding land by a man who loved it. Before he died in 1820, William Henry Jackson, a professor, bequeathed the tree to itself. He loved the tree deeply and the marker at the foot of the tree reads: "For and in consideration of the great love I bear this tree and the great desire I have for its protection, for all time, I convey entire possession of itself and all land within eight feet of the tree on all sides."



Today, the town of Athens protects the tree, which has many visitors yearly. Every single elementary school in Athens has a seed from the tree, and these seeds have grown as many as a hundred other trees. Love makes the world go round. Part of being strong is being loved and loving back. How does the love William Henry Jackson felt for his tree show itself in the sign he left there? He began with one seed, and now every single elementary school in the town has a seed from the tree. People come to visit the tree just like they did the Hugging Tree. How does love help us be strong, and how does it nurture others?

#### 8. Angel Oak

Just outside Charleston, South Carolina, on steamy Johns Island, is a centuries-old tree called Angel Oak. It is draped with mosses and ferns, a beloved local landmark that draws as many as 50,000 tourists each year. Its massive limbs sweep the ground, and its canopy covers 17,000 square feet. It's one of the grandfathers of the tree world, and for decades, it was a tree where black people and white people could gather together under its shade. It



represented community without prejudice. We may be different colors on the outside, but inside we are all the same. Part of resilience is understanding the connection we all have to each other, and how we are all part of the same human family. Instead of judging, which makes us feel separate, we join together. How did the Angel Oak protect people with different skin colors so they didn't fight and hurt but sat together under the tree?

#### 9. The Monks

The trees of the Nigala Forest in Sri Lanka are monks. They were ordained by Buddhist monks from various parts of the world. Over a thousand trees have been ordained in a forest rich with gardens, trees, and medicinal plants. The tree ordination ceremony allows Buddhist monks to drape the trees in orange robes, rendering them sacred and causing loggers to avoid cutting down the trees. Just like the boy in *The Hugging Tree*, the Buddhist monks protect their beloved trees by turning the trees into monks! Then loggers cannot cut them down. How does this remind you of the Hugging Tree—and teach us again that the heart of resilience is having heart, and loving and caring for each other?

**Science Connections: Trees** 

Explore these interactives to increase your knowledge about trees:

https://www.theforestacademy.com/tree-knowledge/

https://www.arborday.org/kids/carly/lifeofatree/

https://www.agriculture.purdue.edu/fnr/stoutwoods/activities/pullingparts.s wf

## **Resilience: Migration and Birds**

In the book, the loons fly south in winter. Have you ever seen birds flying south for the winter? Do they form a big "V" in the sky? Do you wonder how far they are flying? Watch these videos to learn about how and why birds migrate long distances:

www.youtube.com/watch?v=mfbIPJMQr8Y

www.youtube.com/watch?v=USOasz\_zq\_I

Discuss: When birds need food and warmth in winter, they migrate long distances. How can they fly so long without getting tired and scared?

As a class, share the questions and answers about bird migration and look at different birds here:

http://idahoptv.org/dialogue4kids/season11/bird\_migration/facts.cfm

http://ibc.lynxeds.com/

When the students have finished, come together as a class and discuss:

- How do birds prepare for the long journey south in winter?
- Do birds get scared or lost? How do they know where to fly?
- What can we learn from resilience in birds?

#### <u>Classroom Option:</u>

As a class, set up a bird feeder and choose the seeds for the feeder. Watch which birds come. Do you feel like the boy in the book? Are you helping

birds grow big and strong? What do they give back to you—their pretty colors and their beautiful songs?

More bird exercises for kids:

http://www.birds.cornell.edu/education/kids

#### Math Connections: Measurement

Connect your students to nature by taking them on a nature walk. Ask each class member to collect an item from the walk that they find most interesting. It may be a rock, a leaf, a stick, a flower, a blade of grass, etc. Be sure to set parameters that the item must come from nature and that it must be appropriate for class. (You may need to be more specific on what is acceptable based on your students.)

K-2 Teachers: Back in your classroom, use this activity to review nonstandard measurement:

http://pbskids.org/cyberchase/mat http://www.globalclassroom.org/rulergame200/index.htmlh-games/sleuthson-the-loose/

Next, give each student a paperclip and have them use it to measure their interesting item. (Depending on the experience your students have, you may want to give each person several paperclips to lay end to end.)

Then, group your students and have them share their paperclip measurements. Ask if there is an item someone in their group collected that they could use instead of the paperclip to measure the rest of the items in their group. (If not, collect a stick on the walk that you can break into pieces and give the group a piece.) Have the students measure their items with the new measuring tool. Have them compare that measurement with their paperclip measurement. Is it larger or smaller than your first measurement? Why? Ask the students to determine which item in their group is the largest and which is the smallest. How did they decide? Ask them to order their items from largest to smallest. How did they decide where each item belonged?

If the students are enjoying measuring, re-group and continue measuring and comparing measurements. Walk around and discuss with the groups why the same item can have different measurements. Choose several students to share their three measuring tools, three measurements, and why some measurements of the same item were larger and some were smaller.

3-6 Teachers: Back in your classroom, use this tutorial to review why accurate measurement is important and how to use a ruler:

## http://www.subtangent.com/maths/measures1.php

Next, have your students estimate and then measure their interesting item with a ruler. Ask them to figure out how close their estimate was to the actual measurement. Have a few students share their results. If some students measured in inches and some in centimeters, discuss the importance of specifying the unit of measurement.

Then, have students get into pairs and determine who has the longest item. Ask how much longer it is than their partner's item. (If the students used different units of measurement, ask them what they think they should do in order to compare the items. Ask them why it is important to re-measure with the same unit of measurement.)

Split the class into two groups. Have each large group order their items from longest to shortest. If some items are the same length, ask them to figure out how they could measure more precisely to determine if one is longer. Discuss the use of inches versus centimeters or millimeters. Re-measure where necessary to put the objects in order.

#### **Art Connection**

Ask students to draw or paint their emotions. They can do this using colors to express their emotions. Are you feeling mad—red? Nervous—orange? Calm—green? Peaceful—blue? Just paint your emotions. Discuss how painting your emotions makes you feel more connected, calmer, and stronger.

Draw outside. Take the class outside and ask them to paint and draw in nature. How does nature help calm and uplift them and give them hope?

Have each child draw a place where they feel safe. How does feeling safe help us overcome challenges?

Draw something that is scary. Bring that fear to light and talk about why it scares you. Is it really so scary after all? What can you do to make it less scary?

Draw yourself as a tree. Draw lots of roots, and write at the bottom of each root one of your good qualities. At the top of the leaves, write your dreams for your life—things you want, whether it's a summer vacation, a new bike, a pet. How does it feel knowing that your roots and strength come from all your good qualities? How does it feel thinking about your dreams?

Here are several sites for students who would like to create a drawing online:

http://www.scribbletown.com/scrib\_paint.html

http://downloads.bbc.co.uk/rmhttp/cbeebies/getsquiggling/fun/magicpaintbox.swf

Music Connection: Rainforest Meditation

https://www.youtube.com/watch?v=d\_fcF2y\_p\_A

As the students are listening, encourage them to discuss:

- What forest sounds do you hear?
- How does the music make you feel at different points?
- What do you think this forest looks like? Are the trees tall? Close together? Is it sunny today? Is the forest peaceful?

## **APPENDIX**

# Common Core Standards Addressed by the Activities in this Guide

## **ELA Standards**

CCSS.ELA-LITERACY.RL.K.1

With prompting and support, ask and answer questions about key details in a text.

CCSS.ELA-LITERACY.RL.K.3

With prompting and support, identify characters, settings, and major events in a story.

CCSS.ELA-LITERACY.RL.K.6

With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.

CCSS.ELA-LITERACY.RL.K.7

With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).

CCSS.ELA-LITERACY.RL.1.1

Ask and answer questions about key details in a text.

CCSS.ELA-LITERACY.RL.1.3

Describe characters, settings, and major events in a story, using key details.

CCSS.FLA-LITERACY.RL.1.4

Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

CCSS.ELA-LITERACY.RL.1.7

Use illustrations and details in a story to describe its characters, setting, or events.

#### CCSS.ELA-LITERACY.RL.2.1

Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

#### CCSS.ELA-LITERACY.RL.2.3

Describe how characters in a story respond to major events and challenges.

#### CCSS.ELA-LITERACY.RL.2.7

Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.

#### CCSS.ELA-LITERACY.RL.3.1

Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

### CCSS.ELA-LITERACY.RL.3.2

Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.

#### CCSS.ELA-LITERACY.RL.3.3

Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

#### CCSS.ELA-LITERACY.RL.3.4

Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.

#### CCSS.ELA-LITERACY.RL.4.1

Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

#### CCSS.ELA-LITERACY.RL.4.2

Determine a theme of a story, drama, or poem from details in the text; summarize the text.

#### CCSS.FLA-LITERACY.RL.4.3

Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).

#### CCSS.ELA-LITERACY.RL.4.4

Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).

#### CCSS.ELA-LITERACY.RL.5.1

Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.

#### CCSS.ELA-LITERACY.RL.5.2

Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.

#### CCSS.ELA-LITERACY.RL.5.4

Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.

## Math Standards

#### CCSS.MATH.CONTENT.K.MD.A.2

Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

#### CCSS.MATH.CONTENT.1.MD.A.1

Order three objects by length; compare the lengths of two objects indirectly by using a third object.

#### CCSS.MATH.CONTENT.1.MD.A.2

Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand

that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

CCSS.MATH.CONTENT.2.MD.A.1

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

CCSS.MATH.CONTENT.2.MD.A.2

Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

CCSS.MATH.CONTENT.2.MD.A.3

Estimate lengths using units of inches, feet, centimeters, and meters.

CCSS.MATH.CONTENT.2.MD.A.4

Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

CCSS.MATH.CONTENT.3.MD.B.4

Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch.

CCSS.MATH.CONTENT.3.NBT.A.2

Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

CCSS.MATH.CONTENT.4.MD.A.2

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

#### CCSS.MATH.CONTENT.4.NBT.B.4

Fluently add and subtract multi-digit whole numbers using the standard algorithm.

#### CCSS.MATH.CONTENT.4.NBT.B.5

Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

#### CCSS.MATH.CONTENT.4.NBT.B.6

Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

## CCSS.MATH.CONTENT.5.NBT.B.5

Fluently multiply multi-digit whole numbers using the standard algorithm.

#### CCSS.MATH.CONTENT.5.NBT.B.6

Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

## **APPENDIX**

## **Obstacles and Successes**

#### The Obstacle

This person could barely afford to feed her baby in 1994. She had little money, but she did have an idea for a book. She wrote the book using a typewriter because she couldn't afford a computer. She wanted to get the book published but that meant she had to have many copies of the book to send to publishers. She couldn't afford to photocopy 90,000 pages, and it wasn't written on a computer so she couldn't just print them out.

#### The Success

The person is J.K. Rowling, author of the Harry Potter series. She typed out many copies of the 90,000 page manuscript on her typewriter. It was rejected dozens of times, but she kept on sharing it with publishers. Eventually a small London publisher gave it a chance after the CEO's eight-year-old daughter found a copy on his desk and fell in love with the story. J.K. Rowling is now a wealthy, successful woman.

#### The Obstacle

This person was fired from many jobs. To make money, he began cooking chicken in his roadside Shell Service Station. He spent 10 years perfecting his chicken recipe and eventually opened a restaurant. Everyone loved his chicken and times were good. Then, an interstate was built through his town which meant many people would no longer drive on the road where his restaurant was located. People drove through town instead of stopping at his restaurant, and it was eventually forced to close.

## The Success

This person is Colonel Harland Sanders, the founder of Kentucky Fried Chicken (KFC). He set out to find restaurants that would like to sell his chicken, and he would receive a nickel for every piece they sold. He drove around to different restaurants during the day and slept in his car at night to save money. 1,009 restaurants told him no before he finally found one that said yes. Today, there are over 14,000 KFC restaurants worldwide.

#### The Obstacle

This person was fired from his writing job for a newspaper. The editor of the paper said he "lacked imagination and had no good ideas." After that, he started many businesses that didn't last long and eventually failed.

#### The Success

This person is Walt Disney, creator of the Disney empire. Walt Disney kept plugging along and trying new businesses until he found one that worked! Today Disney theme parks and movies delight adults and children from all over the world.

#### The Obstacle

In his early years, teachers told this person that he was "too stupid to learn anything." He was fired from his first two jobs for not being productive enough. This person tried 1,000 times to invent the light bulb.

## The Success

This person is Thomas Edison, inventor of this light bulb. Edison kept trying until he invented a light bulb that worked. He invented many other things and was able to build a huge factory complex. When a large part of the complex burned to the ground, he stood watching the fire and said, "It's OK. We just have a lot of rubbish to clear away. We'll start building again tomorrow." And he did.

#### The Obstacle

This person loved to play basketball, but he was cut from his high school basketball team because the coach didn't believe he was a good enough player.

#### The Success

This person was Michael Jordan, one of the most successful basketball players of all time. Michael kept on playing basketball and perfecting his

skills, and he never gave up. He has said, "I have missed more than 9,000 shots in my career. I have lost almost 300 games. On 26 occasions I have been entrusted to take the game winning shot, and I missed. I have failed over and over again in my life. And that is why I succeed."

#### The Obstacle

This person sent his first book to 27 different publishers, and they all said that it wasn't good enough to publish.

#### The Success

This person is Theodor Seuss Geisel, the famous author, Dr. Seuss. Dr. Seuss kept sending his first book, *To Think That I Saw It on Mulberry Street,* to publishers until one decided to publish it. Now, children all over the world enjoy books by Dr. Seuss including *The Cat in the Hat* and *Green Eggs and Ham.* 

#### The Obstacle

This person had every cartoon he submitted rejected by his high school yearbook staff. After high school, he applied to work for Walt Disney companies and he was rejected.

#### The Success

This person is Charles Schultz, creator of the beloved *Peanuts* comic strip. Charles didn't let others discourage him from drawing. He kept drawing comics and eventually created *Peanuts*.

Ask your students to discuss these individuals, their obstacles, and their successes. How did these individuals overcome failure? Did they keep going? Did they give up? What gifts did they bring to the world? Think of how many people love Dr. Seuss's books, or the *Peanuts* comic strips. Think about the light bulb and how it brings light to every home at night. If these individuals had given up early, we would never have these delightful things. Resilience is important not just for ourselves, but for what we can bring to others. The Hugging Tree brings warmth and shade to people every day because she was resilient through troubles and obstacles.

## **APPENDIX**

## A Real-Life Hugging Tree: Lonely Tree

High on a rise above the town of Llanfyllin, Wales, stood a tree. The people of the town called it "Lonely Tree" because there was nothing else around it. The tree could be seen from all around town. Townspeople carved their names into its trunk, people were engaged to be married beneath it, and scouts camped under its limbs. "It was part of the town. It was always there," said local farmer Peter Lewis.

But Lonely Tree is not standing high on a rise anymore. It fell over in hurricane strength storms. Now the people of the town are fighting to save the 200 year old tree. Ancient tree specialists said the tree might be saved by packing its roots with soil. The townspeople dug nearly 60 tons of soil from the valley below and hauled it up to the tree. The hope is that if its roots are protected by the soil, it will grow again from its trunk. But they might not know for a year whether it will survive.

Tradition in the town always said you had to hug the tree for good luck. Since it fell, hundreds of people have been doing just that. Local author Richard Kretchmer shared, "It is something important. Something loved. Never has a tree been less lonely."

www.treeoftheyear.org/Letosni-rocnik/Osamely-strom-v-Llanfyllinu.aspx