

# Quest to Learn School for digital kids

## **Calling all Q-dents!**

We are thrilled to welcome you to the Quest to Learn community and want to kick things off with a summer challenge. Please read over and complete the **FOUR** Missions described in this packet. Feel free to contact us if you have any questions!

All Missions are required and will be collected by your domain teachers on the first day of school.

## **What if I have questions about the Summer Challenge Missions?**

Email: Arana ([ashapiro@q2l.org](mailto:ashapiro@q2l.org)) or Rebecca ([rrufo-tepper@q2l.org](mailto:rrufo-tepper@q2l.org))

## **SUMMER CHALLENGE TABLE OF CONTENTS**

**PAGE 2:** Overview of Missions (Find out about your Missions)

**PAGE 3:** Mission #1 (Reading, Map, & Game Design Challenge)

**PAGE 4:** Mission #2 (Summer Experiment)

**PAGE 5, 6, 7:** Mission #3 (Wellness Character Exploration)

**PAGE 8:** Mission #4 (Math Tools Challenge)

**PAGE 9-11:** Summer Reading List (for Mission #1)

## **OVERVIEW OF MISSIONS**

### **MISSION #1: Reading, Map, & Game Design Challenge**

*In this mission, your job is to read one of the Summer Reading books and create a map based on what you have read. Then, you will create a game that uses your map and knowledge from the book.*

- \_\_\_\_\_ 1. **Select** ONE book from the reading list (pages 7-9).
- \_\_\_\_\_ 2. **Read** your selected book.
- \_\_\_\_\_ 3. **Complete** Quest #1 on page 3.
- \_\_\_\_\_ 4. **Complete** Quest #2 on page 3.

### **MISSION #2: INSTRUCTIONS**

*In this mission, your job is to conduct one of the experiments from the list provided to you in this packet. After you have conducted the experiment, create a poster (11" x 16) that outlines the experiment.*

- \_\_\_\_\_ 1. **Select** ONE experiment from the list on page 4
- \_\_\_\_\_ 2. **Read** the procedure for your experiment.
- \_\_\_\_\_ 3. **Read** ALL the information for the experiment you choose.
- \_\_\_\_\_ 4. **Follow** the directions/procedures and conduct the experiment.
- \_\_\_\_\_ 5. **Create** a poster outlining the experiment (see details on page 4).

### **MISSION #3: INSTRUCTIONS**

*In this mission, your goal is to tell us as much as you can about yourself. You will first write a letter describing who you are as a student, what your interests and hobbies are and any information you feel we should know. Then, you will complete a questionnaire that asks you to use descriptive words to define yourself and your friends. Lastly, you will complete an online teamwork survey that will help us understand how you work best!*

- \_\_\_\_\_ 1. **Read** the letter on page 5
- \_\_\_\_\_ 2. **Complete** Quest #1 on page 5
- \_\_\_\_\_ 3. **Complete** Quest #2 on page 6
- \_\_\_\_\_ 4. **Read** the Instructions for Quest #3 on page 7
- \_\_\_\_\_ 5. **Complete** Quest #3 Using the link to the Online Survey

### **MISSION #4: INSTRUCTIONS**

*In this mission, your goal is to create a summer math journal. The journal can be in the form of a marble notebook or by stapling papers together.*

- \_\_\_\_\_ 1. **Read** the requirements on page 8
- \_\_\_\_\_ 2. **Complete** one math problem per week on a separate sheet of paper.

## **MISSION #1: Reading, Map, & Design Challenge**

### **Quest 1: Map It!**

In this quest you are challenged to create a map detailing an important location in the summer reading book that you read. For example, if you were to create a map for *Hatchet*, try and map the area of the Canadian Wilderness that Brian has to survive in. For *First Light*, you could create a map of "Gracehope."

Here are some things to keep in mind as you create your map:

- Your map must be an accurate reflection of a location in the book. A good map will reflect how well you read by including all sorts of details.
- Include all the important COMPONENTS of a map (key/legend, compass rose, scale, shading, symbols, map title, etc).
- Be aware that someone will want to read your map and use it. Neatness, proper spelling, and clarity is very important.

Checklist of Elements:

- Map should be created on paper no bigger than 8½" x 11" sheet of paper.
- You can create your map key on an index card (attach it to the map)

### **Quest 2: Game Maker**

In this quest you are challenged to invent a game inspired by the book you have selected. But there's a twist! The game must use the map that you created in Quest 1.

Your game can be a board game (like RISK), a card game, or anything in between. Along with your map, create game characters, write a game story, and design game pieces – anything, as long as it makes your game playable and fun!

The only real rule is that your game should have rules, or else we won't know how it is played!

Here are some questions to **think** about before you begin designing:

- Who are you designing your game for? For one person or for many players?
- What is a conflict or dilemma in the story that you could design a game around?
- What is the core problem or obstacle your player must overcome?
- How does the design of your map create a space for play?

Checklist of Elements:

Your game must have the following elements:

- Title
- Quest #1 Map
- Game description
- List of rules
- Game materials that ALL fit in a 1 gallon-sized Ziplock baggie (anything you create is part of the game: game board, character cards, dice, etc)

## **MISSION #2: Summer Experiment**

**Experiment:** Choose one of these three experiments.

**<http://www.education.com/activity/article/egg-bungee-jump/>**

**<http://www.education.com/activity/article/bone-strength/>**

**[http://www.education.com/activity/article/Centripetal Force middle/](http://www.education.com/activity/article/Centripetal_Force_middle/)**

**Poster:** Once you have conducted your experiment, create a poster that outlines the experiment you choose. Below are some things to include on your poster (11" x 16).

- Make sure your name is written on the back LAST, FIRST.
- Include a clear and legible title that is appropriate for the experiment.
- Include a written summary of the experiment.
  - What you did.
  - What you observed.
  - What you thought about the experiment.
- Include colorful illustrations or photographs of your observations.
- NEATNESS COUNTS!

## **MISSION #3: Wellness Character Exploration**

### **WELLNESS QUEST #1**

Dear Q-dent:

Welcome to Quest to Learn!!

During your first year, we will be learning about the many values and traits it takes to make up our school community. There are values that all of us at Q2L need to succeed, but we must also acknowledge and accept our differences- this what makes our school unique and allows us to learn from one another. The more we each know about ourselves, the more we can make sure that we have what we need to be and do our best. The more we know about the other people in our community, the more we can support each other.

Here are some things I'd like you to know about me: I am happy when I get enough sleep, eat good food, talk about interesting things with my friends, read good books, choreograph beautiful dances and do yoga. I feel proud when I can finish a new project, and when I can find ways to say complicated things with simple words. I feel stressed out when I try to do too many things at once or when someone in my family is sick. Even when my life gets complicated, I feel calm when I can make lists of things I need to do, remember to breathe deeply and get enough exercise.

So for us to get to know you better, please write a letter to tell me about you. What makes you happy? What makes you feel proud? When do you feel stressed out or upset? What helps you to feel better? Is there anything else you'd like me to know about you?

I am very excited to read your letter and to get to know you better!

Sincerely,

Rachelle Vallon

School Counselor & Wellness Coordinator

**Wellness Survey**  
**WELLNESS QUEST #2**

Complete all questions on this survey as best as you can. This will help to get a better understanding of you, how you learn, and how you work with others.

1. List 3 words you would use to describe the personalities of your friends:

\_\_\_\_\_

2. List 3 words you would use to describe people you like to collaborate\* with (Collaborate is a word we use a lot at Q2L. It means: work together on a project.):

\_\_\_\_\_

3. List 3 words you would use to describe people you avoid:

\_\_\_\_\_

4. List 3 words you would use to describe people you admire:

\_\_\_\_\_

5. List 3 words you would use to describe students you think of as leaders:

\_\_\_\_\_

6. What words would I like other people to use to describe me?

\_\_\_\_\_

7. Why do I want others to think of me this way?

\_\_\_\_\_

\_\_\_\_\_

## What Does Teamwork Mean to You?

### WELLNESS QUEST #3

**Step1:** Visit the following link:

<http://www.surveymonkey.com/s/XDFQKZJ>

**Step 2:** Read each question and select the answer that best describes how you feel.

**Step 3:** Click the "Done" button at the bottom of the webpage when you have answered every question.

*Remember: There is no right or wrong answer!!*

## **MISSION #4: Math Tools Challenge**

### **Mission Requirements:**

Each journal entry should:

- be done on a separate piece of paper
- contain the date clearly labeled
- have the entire word problem written out
- have a clear and complete answer that explains a student's thinking
- show all of the student's work
- be neat and organized
- only be done in pencil (*NOT PEN*)

### **Directions:**

*Each week you will solve at least one word problem. You can choose from the following word problems to solve.*

1. David was offered a job at the nearby pizzeria. The owner offered him \$500.00 per seven-day week or \$0.50 the first day and agreed to double it for each following day. How could Billy make the most amount of money? Which deal should he accept and why?
2. Genesis is having a birthday party with 10 people. When everyone gets there she asks everyone to introduce themselves and shake everyone's hand. How many handshakes will there be? How do you know?
3. Basketball Time! The coach has asked for your help to create a basketball schedule. There are a total of 8 teams and all the teams need to play each other twice. There are two gyms and games can be played on Tuesdays, Thursdays and Saturdays. Create the schedule.
4. How many different types of pizza can you make with the following toppings: pepperoni, tomatoes, onions and green peppers? Show your answer.
5. Who has the largest piece of chocolate? Melissa has  $\frac{1}{3}$  of a bar, Maria has  $\frac{4}{6}$  of a bar, Derek has  $\frac{9}{12}$  of a bar, Daniel has  $\frac{13}{18}$  of a bar. Show how you know the answer.
6. Watch your favorite television show from beginning to end. Time each of the commercials and determine the percentage of commercial time for the entire show. Now determine the percentage of time the actual show is.
7. Mr. Tang wants to buy enough dirt for his new field. The length of the field is 30 feet, the width of the field is 66 feet. How much dirt will he need to buy? How much will it cost him if the dirt sells for \$5.00 per 25 cubic feet?
8. How many addition signs should be put between digits of the number 987654321 and where should we put them to get a total of 99?

9. A man has to be at work by 9:00 a.m. and it takes him 15 minutes to get dressed, 20 minutes to eat and 35 minutes to walk to work. What time should he get up?

10. The Riddler has left a clue for Batman to follow at the scene of each crime.

These are the clues that Batman has found:

- There is a 1 in the thousands place.
- The digit in the tens place is 9 times the digit in the thousands place.
- Multiply the digit in the thousands place by 2.
- The digit in the ones place is a hand without a thumb.
- The digit in the hundreds is 2 less than the number in the tens.

Solve the riddle to find the number and help Batman stop the Riddler!

## **MISSION #1: READING LIST**

Prices from [www.amazon.com](http://www.amazon.com) are given for your convenience. Grade levels are approximate – parents are encouraged to help their child select a book that is appropriately challenging. Students should use the reviews below to pick a book with a genre and plot that is appealing to them.

\* \* \* \* \*

### **Option #1: *Hatchet* by Gary Paulsen**

Hardcover – 13.59 on [www.amazon.com](http://www.amazon.com)

Approximate level – Grade 6 and up

Review from *Publishers Weekly*:

When the pilot of a small, two-person plane has a heart attack and dies, Brian has to crash land in the forest of a Canadian wilderness. He has little time to realize how alone he is, because he is so busy just trying to survive. And learning to survive, to plan on food not just for a day but until he is rescued, only begins when he stops pitying himself and understands that no one can help him. He is on his own, without his divorced father, whom he was to visit, or his mother, whom Brian saw kissing another man before the divorce.

This is a heart-stopping story: it seems that at every moment Brian is forced to face a life-and-death decision, and every page makes readers wonder at the density of descriptive detail Paulsen has expertly woven together. Poetic texture and realistic events are combined to create something beyond adventure, a book that plunges readers into the cleft of the protagonist's experience.

### **Option #2: *Ender's Game* by Orson Scott Card**

Paperback – \$6.99 on [www.amazon.com](http://www.amazon.com)

Approximate level – Grade 7 and up

From the Publisher:

In order to develop a secure defense against a hostile alien race's next attack, government agencies breed child geniuses and train them as soldiers. A brilliant young boy, Andrew "Ender" Wiggin lives with his kind but distant parents, his sadistic brother Peter, and the person he loves more than anyone else, his sister Valentine. Peter and Valentine were candidates for the soldier-training program but didn't make the cut—young Ender is the Wiggin drafted to the orbiting Battle School for rigorous military training.

Ender's skills make him a leader in school and respected in the Battle Room, where children play at mock battles in zero gravity. Yet growing up in an artificial community of young soldiers Ender suffers greatly from isolation, rivalry from his peers, pressure from the adult teachers, and an unsettling fear of the alien invaders. His psychological battles include loneliness, fear that he is becoming like the cruel brother he remembers, and fanning the flames of devotion to his beloved sister. Is Ender the general Earth needs?

But Ender is not the only result of the genetic experiments. The war with the Buggers has been raging for a hundred years, and the quest for the perfect general has been underway for almost as long. Ender's two older siblings are every bit as unusual as he is, but in very different ways. Between the three of them lie the abilities to remake a world. If, that is, the world survives.

**Option #3: *Julie of the Wolves* by Jean Craighead George**

Paperback – \$5.99 on [www.amazon.com](http://www.amazon.com)

Approximate level – Grade 5 and up

From the Publisher:

To her small Eskimo village, she is known as Miyax; to her friend in San Francisco, she is Julie. When the village is no longer safe for her, Miyax runs away. But she soon finds herself lost in the Alaskan wilderness, without food, without even a compass to guide her.

Slowly she is accepted by a pack of Arctic wolves, and she grows to love them as though they were family. With their help, and drawing on her father's teachings, Miyax struggles day by day to survive. But the time comes when she must leave the wilderness and choose between the old ways and the new. Which will she choose? For she is Miyax of the Eskimos—but Julie of the Wolves.

Faced with the prospect of a disagreeable arranged marriage or a journey across the barren Alaskan tundra, 13-year-old Miyax chooses the tundra. She finds herself caught between the traditional Eskimo ways and the modern ways of the whites. Miyax, or Julie as her pen pal Amy calls her, sets out alone to visit Amy in San Francisco, a world far away from Eskimo culture and the frozen land of Alaska.

During her long and arduous journey, Miyax comes to appreciate the value of her Eskimo heritage, learns about herself, and wins the friendship of a pack of wolves. After learning the language of the wolves and slowly earning their trust, Julie becomes a member of the pack.

**Option #4: *First Light* by Rebecca Stead**

Paperback – \$6.99 on [www.amazon.com](http://www.amazon.com)

Approximate level – Grade 6 and up

Review from *Kirkus Reviews*:

With the impending threat of global warming as an ominous backdrop, teens from very different worlds find they have much in common. Twelve-year-old Peter and his parents leave Manhattan on a scientific expedition to Greenland where Peter's father and his assistant will study the effects of global warming. After settling into the frozen world, Peter senses his parents share a secret, while he experiences migraines with strange visual effects.

Meanwhile, below Greenland's surface, 14-year-old Thea lives in Gracehope, an amazing underground colony settled generations before by a persecuted group of people from England. Descended from Gracehope's original founder, Thea is convinced the future of her people lies above the ground. While Peter's visions draw him toward Gracehope, Thea's convictions draw her toward the light. As Peter struggles to figure out his parents' secret, Thea grapples with secrets in her own family.

Alternating between Peter and Thea's stories, this compelling contemporary ice-age mystery introduces two engaging characters whose personal courage is tested as they discover one another's worlds as well as the truth about themselves. A thoroughly enjoyable arctic adventure.

**Option #5: *The Wreckers* by Iain Lawrence**

Paperback – \$6.99 on [www.amazon.com](http://www.amazon.com)

Approximate level – Grade 6 and up

Review from *School Library Journal*:

In this novel set in 1799, 14-year-old John Spencer of London falls in love with life at sea on his first voyage as a passenger on his father's merchant sailing ship. He can't bear to think about plans for his desk-bound future in the family business. The young man's dreams and disappointments must be set aside when a furious storm claims the vessel and its crew. Washed onto a Cornish beach, John at first seems incredibly lucky, but soon finds that the ocean has delivered him into danger. The nearby village of Pendennis supports itself communally through the practice of "wrecking": tricking vessels onto the lethal coastal rocks, then looting the remains. However, the goods cannot be claimed if there are any survivors. As John uses his wits and his few sympathizers to plan an escape, he learns that his father may also be alive. He must overcome ever more perilous challenges if he is to save the man from a dreadful captivity.

Though most of the exciting, fast-paced action occurs on land, this is really a sea story in the grand tradition of sailors' yarns, full of cliffhanging moments and well-drawn, colorful characters. The author expertly weaves maritime lingo and details into the narrative, creating an entertaining and engrossing nautical adventure.