

We've ran through the rainforest, danced in the deserts, sloshed through the swamps, and now it's time to master the mountains! Have students continue to work together as tribes. Throughout the units, tribes will compete in fun, non-competitive activities that will challenge their intellectual, cooperative, and athletic skills. Remind them that everything they do matters to the tribe and helps us survive (or not...)

Part One: Day One

"Silent Storytelling: Motion Speaks Louder Than Words"

Begin by activating students' existing knowledge about how stories can be told without words. Ask the following questions:

Does anybody know how to play charades?

Can somebody remind me of the rules?

How can you tell a story without words?

Why would you want to?

There are many kinds of narratives and one thing that many story tellers love about animation as a medium is its universality. There's something about the art of motion through pictures that compels



creators to tell stories solely with visuals, absent of dialogue or other cultural limitations. Play. Watch. Enjoy. Language not required. Sure, there are a multitude of exceptions, but for many animators—especially those behind short films—the medium becomes a celebration of speaking with one's pictures. Story through action, emotion through motion. Visual storytelling. There are also many authors that choose to 'write' their books without dialogue, ex. Freefall by David Weisner, The Chicken Thief (Stories

Without Words): Béatrice Rodriguez, and more.

Continue the discussion about survival with a video such as *The Girl and the Fox* "A hauntingly beautiful [very] short film..." http://www.shortoftheweek.com/2012/06/06/the-girl-and-the-

fox/ At its core, the film is about survival. When a mysterious fox starts killing her family's livestock, a young girl sets out to track and kill the nefarious creature. What results is a series of encounters that turns the very notion of survival on its head—an examination of how one's enemy can quickly become one's savior. This is visual storytelling at its finest—a powerful and symbolic journey without a single word uttered.



The Girl and the Fox

Option: As time/if time allows, then watch the short film *Au*sommet du monde, le Roi a Froid [At the Top of the World, the King is

Cold] https://wimeo.com/29412675 or at https://wimeo.com/29412675 or at https://wimeo.com/29412675 or at https://www.maudebbreton.com/#!/8/, so they can



compare that story of survival to the first. [We will learn more about ibexs/mountain goats later in our travels.] **Note: ALWAYS watch films and videos first to gauge their appropriateness for your classroom and students.**

When finished, ask the kids what questions they have about the text/visual tale(s), in any order,

interweaving your own questions about the film, events, pictures and story. Do they share anything in common? Are they completely different? Remember, as discussion leader you must be a facilitator only. Be careful not to ask leading questions or to insert your own opinions or interpretations. This is a discussion-building exercise intended to help guide the children's insights

by fusing interpretive questions based on information in the story, rather than factual or evaluative questions. As kids ask questions and as they respond to you and each other, they will notice things they never did before.

Now ask the children to take a piece of blank paper and drawing tools. Ask them to draw one picture from the selected story that they think nobody else will draw. Emphasize that qualification: something that **nobody else will draw**. Stress also that they are not allowed to talk while they are doing it, and for a little while longer as well. Yes, that's difficult, especially for little kids, but it's just for a while—tell them that the project will be fun. Give them several minutes to draw the pictures.

Now, gather the kids and have them join you on the floor or in some other large, open area—still without them talking. As a group, you are going to put the pictures into the proper sequence silently, just by pointing. Take the pictures the students have made an put them in proper order. Determine if anyone actually drew the same part of the story. Discuss why they thought no one else would draw the same thing.

Film Side Notes: The Girl & the Fox

In the original animatic there was an additional scene at the end where the girl is back at home, and the fox appears at the edge of the forest. She approaches it, but it backs away warily. She then offers it food, which it refuses. The girl is upset that the fox has refused her friendship. But seeing this, the fox pushes its head into her hand, as a sort of reverse pet. It then swiftly pulls away, and disappears into the forest once more. The girl is left alone to the sound of the birds and the wind.

Would seeing this sequence change how you perceived or felt about the film?

Talk again and ask questions about the sequence. You've created a storyboard. a planning device used to visually "sketch out" the actions of a story that will be told in a visual medium.

Standards Alignment Day One: K-8

K

• RL.K.7. a 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).

• RI.K.7.b With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).

These standards will be met during discussions of the videos and of students' chosen moments from the film/their illustrations. They will need to explain why they chose that image, what stuck out to them, why it was/wasn't memorable, etc.

1st

- RL.1.7a. Use illustrations and details in a story to describe its characters, setting, or events.
- RI.1.7.b. Use the illustrations and details in a text to describe its key ideas.

These standards will be met during discussions of the videos and of students' chosen moments from the film/their illustrations. They will need to explain why they chose that image, what stuck out to them, why it was/wasn't memorable, etc.

 2^{nd}

- RL.2.7.a Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.
- RI.2.7. b Explain how specific images contribute to and clarify a text.

These standards will be met during discussions of the videos and of students' chosen moments from the film/their illustrations. They will need to explain why they chose that image, what stuck out to them, why it was/wasn't memorable, etc.

3rd

- RI.3.7.a Use information gained from illustrations and visual presentations in a print or digital text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
- RL.3.7. b Explain how specific aspects of a print or digital text's illustrations contribute to what is conveyed in a story (e.g., create mood, emphasize aspects of a character or setting).

These standards will be met during discussions of the videos and of students' chosen moments from the film/their illustrations. They will need to explain why they chose that image, whetehr or not it was a key moment or event, at what point it happened in the film, what stuck out to them, why it was/wasn't memorable, etc.

4th

- RI.4.5. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a print or digital text or part of a text.
- 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).

These standards will be met during discussions/student analyzations of the videos after we have watched them and the discussions of students' chosen moments from the film/their illustrations. They will need to explain why they chose that image, what stuck out to them, why it was/wasn't memorable, etc.

5th

- RL.5.7. Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text
- RL.5.2. Determine a theme of a print or digital story from details in the text or video, including how characters in a story or drama respond to challenges.

These standards will be met during discussions/student analyzations of the videos after we have watched them. We will discuss how the music, images, and lack of dialogue effect our perceptions and interactions with the films and whether students think there was a theme to the videos and what that theme was. We'll discuss how the girl, the fox, the king ibex, and the other ibexes responded to the challenges they faced in the films and how each one handled them.

6th

- RI.6.3. Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).
- RL.6.3. Describe how a particular story's or drama's plot unfolds in a series of episodes or scenes as well as how the characters respond or change as the plot moves toward a resolution.

These standards will be met during discussions/student analyzations of the videos after we have watched them. We'll discuss how the storytellers introduced the girl, the fox, the king ibex and the other ibexes and how they are illustrated and shown and whether the techniques used had any particular meaning or purpose behind the approach, are they trying to send a message, or affect our perceptions of that character, etc?

We'll describe whether our perceptions of the characters change as we watch the movies, ex. how do we see the fox in the beginning, how does the girl see the fox, and how do we see both of them by the end, etc. How did the king ibex start out, did he change by the end of the film?

7th

- RL.7.5.. Analyze how a print or digital story's form or structure contributes to its meaning.
- RI.7.3. Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

These standards will be met during discussions/student analyzations of the videos after we have watched them. We will discuss how the music, images, and lack of dialogue effect our perceptions and interactions with the films as well as the meanings we get from them. We'll discuss whether or not/how the ideas and events within the stories (ex. the storms, the fox's behavior) affected each of the characters and how those changes or lack thereof might influence behavior in the future by those characters, etc.

8th

- RI.8.7. Evaluate the advantages and disadvantages of using different mediums or styles (e.g., print or digital text, video, multimedia, text, or wordless) to present a particular topic or idea.
- RL.8.3. Analyze how particular incidents in a print or digital story or drama propel the action, reveal aspects of a character, or provoke a decision.

These standards will be met during discussions/student analyzations of the videos after we have watched them. We will discuss how the music, images, and lack of dialogue effect our perceptions and interactions with the films as well as the meanings we get from them. Students will determine whether they think adding dialogue would have a positive or negative influence on the flms. We'll discuss whether or not/how the ideas and events within the stories (ex. the storms, the fox's behavior) affected each of the characters, added drama or conflict, and effected change or caused a decision to be made.

Part One: Day Two

Survival? We're Flipping Out

The fact is that animation, whether a flip-book or full-length Disney movie, is simply telling a story by finding the right sequence of pictures and words. That is a powerful skill for kids to master. Before any animator, filmmaker or video artist begins a project, he or she first does a storyboard to lay out the sequence of actions.

Most of us remember being shown a flipbook as children.

Flipbooks work so that, when the pages are "flipped" through, it appears that an image on the page is actually moving. A series of still pictures viewed in quick succession creates the illusion of movement, whether it is actors dancing across the silver screen, a horse galloping, a tree growing, a rocket taking off, a cat chasing a dog, a volcano, someone dancing with their mp3 player, a fish getting caught on a line, or a man running on paper.

Flip books offer the most versatility and creativity in hands-on animation projects because they are not limited in length or materials, as is the case with some other techniques. They're inexpensive to create with common materials and require no viewing devices. Most important, the process used to make a flip book forms the basis for all of the more sophisticated animation techniques, including filmed animation.

Watch the 'animatic' or storyboarded version of *Le Roi a Froid* with students at https://vimeo.com/29976775. You can watch the number of frames click by in the bottom right hand corner to see how many 'flip pages' or storyboard sheets the animator had.

For a flip book you first need a story, maybe one as simple as a dot moving



from one side of the page to the other, or as complicated as a truck that seems to disappear in traffic. A flip book simply takes a storyboard and inserts the intermediary steps needed to create the illusion of motion. The basic rule is, if it will flip, it will work, so try index cards, Post-it notepads or other "flippable" media.

Materials

- Post-it notes, index cards, or an old paperback with wide margins
- Pencil
- Markers or other drawing tools
- 1. Have students look at a terrific example of a simple animation in motion, and explain the idea to

them aloud.

- 2. Ask students to think of a simple movement that they would like to portray, such as
 - A boy doing jumping jacks?
 - o Two people running toward each other?
 - A cat chasing a bird?
 - o An erupting volcano?
- 3. Start simple and have kids do several flip books to get the feel of what's possible. The first time, have them use the basic compositional forms of drawing that they're already used to, like dots, lines or circles, so that they focus on placement and sequence rather than the detail within the object. Or try two simple objects, perhaps two arrows starting on opposite sides and crossing each other.
- 4. Now, move on to other ideas on how to tell a story, a story of survival. Perhaps they could look back at our past adventures and draw a person sinking into quicksand, a camel with a shrinking hump crossing the desert, a monkey in the rainforest, an alligator chasing them through a swamp, or a thirsty traveler looking for lemonade...or look ahead to our mountain adventures and have someone scaling a snowy cliff.
- 5. Provide students with small pads of paper (or a pile of sheets of paper, all the same size, which they can tape or staple together at the top to make a pad) to use as



their "film." Students will need at least 25 pages for their flip book. The more pages they have, the nicer it will be, so don't be afraid to encourage them to go for 40 or 50 pages. The pages don't have to be large. Small strips or squares are best. You want something that is easy to hold in their hand and flip with their thumb.

- 6. Small pre-purchased notepads and notebooks can be great for flip books. Sticky note pads in the traditional two inch square size are perfect. And as a plus, they can be easily taken apart and realigned together. If you don't have little note pads, you'll have to cut small pieces to size.
- 7. Next, have students determine how the action, or the motion of their subject, will start and end.
- 8. To make a picture look like it's moving, it's necessary to draw the same thing, but with a little

- change on each page to indicate the movement. Suggest students draw their first and last pictures before we start. The action will begin at the bottom of the book and move to the top. Also, if their last drawing doesn't match the top drawing, don't worry. Just discard it. [Beginners should keep things simple. Stick figures, ants, or bouncing balls can all be worthy flip-book stars.]
- 9. For drawing those middle pages, 'draw or trace the next drawing on the next blank page on top of the drawing they just did. Work from the bottom page of the pad toward the top page. It is very helpful if the pad paper is thin enough to see through slightly. Then they can see the previous drawing. If not, they can flip the upper page every so often to compare the drawings.'
- 10. Remind students to draw their scenes as close to the unbound edge as possible so the action is easy to see when the pages are flipped.
- 11. Tip: When drawing, push down hard with your pencil to create an indentation on the next frame. Use this as a guide to help you reproduce parts of your movie that don't change, like background scenery.
- 12. Make gradual changes from frame to frame. The more similar each frame is to the previous, the smoother the action in the final movie. (To tell a long story, some people use the margins of an old paperback so they'll have hundreds of frames to work with.)
- 13. Tell students to keep drawing until the movement is complete. Ideally, there should be some twist to your story to give it drama, or humor, as in the very very abbreviated samples shown. [Play. Watch. Enjoy. Language not required..]
- 14. When they're done drawing, they can add color to their images. They may not want to add color to everything in their story, but they may want to add it to one aspect to add emphasis or draw attention to something, ex. the bouncing ball, the flower blooming in the desert after rain.
- 15. Once the "story" is mapped out, ask students to thumb-flip the pad forward and backward to show their own mini-movies. As you flip your book from back to front, your image should appear as if it's moving. Don't worry if the motion is a little choppy. Determining how much movement you draw from page to page comes from practice. A great hint to remember is that the faster your object moves, the less drawings you'll need, and the slower it moves, the more drawings you'll need.
- 16. Tip: For help and fun animations go to Robert Truscio's Flip Book Animation tutorial page: http://home.comcast.net/~bobtruscio/drawings/FLIPBOOK.htm

Six Word Stories

Now, If a picture speaks a thousand words, surely students can come up with a few of their own According to legend, Ernest Hemingway was challenged to write a short story using only six words. He came up with: "For sale: baby shoes, never worn." And said it was his

best work ever.

Six-word stories are a great way to practice your writing without actually having to write much. Like a flip book they tell a *short* story. When students first hear about six-word stories, you might get comments like, "A whole story in six words? That's impossible!" But when you try it, you'll find it is really easy, not mention fun! Once they write their first, they can write a whole army of them. Here's

how six-word stories and flip books can be used as a great writing prompt.

Before you have students write a six-word story, you should look at some examples and come up with a few as a group. A great website you can use is sixwordstories.net or choose some that are appropriate from one of the Six-Word Memoir book series (ex. Not Quite What I Was Planning: Six-Word Memoirs from Writers Famous & Obscure) If you just want to look at a few quick examples, here are a few samples:

"Rapunzel! I am slipping! A wig?!"

Still lost on road less traveled.

Misleadingly deep puddle. Curious child missing.

"I love you, too," she lied.

Artificial limb, bungee jump-bad idea.

Her daughter's future was at stake.

That's my dog. He eats sofas.

Everything I touch turns to mold.

Now that they've looked at some examples, they're ready to write!

But if they end up staring at a blank sheet of paper, or a blank whiteboard, have students look again at the flip books, and just think of a sentence or two that might be intriguing and tells a story without telling an *entire* story.

If they're still stuck, try this tip: use magnetic poetry. You know the kind that you put on your refrigerator and mess around with? That often gives kids fun ideas.

If they have an idea, but can't figure out how to shorten it into six words, here's some more advice: use contractions. Use "I'm" instead of "I am." Use "They're" instead of "They are." Now what if their story is too short? Use adjectives. Don't say, "the ball is round." That's only four words. Use, "the ball is *big and* round," or, "the ball is *furry and* round," or even, "The man-eating ball is hungry."

And encourage them to not worry if their six-word stories aren't works of art. They're supposed to be fun and creative.

Finally, display the flipbooks books in front of the class. Organize a class read-aloud where each student is given the opportunity to read his/her story aloud to the rest of the class. Allow the other students in the class time to discuss/comment on each story and decide which flipbook it belongs to.

Or, if students are unwilling or you would rather, gather the six word stories and read them anonymously, having students guess which flipbook inspired the tale.

Standards Alignment Day Two: K-8

K

- RL.K.7. With prompting and support, describe the relationship between illustrations and the story in which they appear (or the story they inspire) (e.g., what moment in a story an illustration depicts).
- W.K.3. Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events.

These standards will be met while students complete the writing/story assignment, edit and peer edit their stories, create final drafts, present them to the class and explain what image inspired the tale and how they were inspired.

1

- RI.1.9. Identify basic similarities in and differences between two texts or presentations (ex. flipbook vs six word story) on the same topic (e.g., in illustrations, descriptions, or text).
- RL.1.7. Use details in a story to describe its [an illustration's] characters, setting, or events.

These standards will be met when given as part of the instructions on what should be included in the story and while students complete the writing/story assignment, edit and peer edit their stories, create final drafts, present them to the class and explain what image inspired the tale and how they were inspired.

2

- RI.2.7. Explain how specific images (e.g., an illustration) contribute to and clarify a text.
- SL.2.4. Tell a story with appropriate relevant, descriptive details.
- W.2.3. Write narratives in which they recount a well-elaborated event or short sequence of events, and include descriptive details, ex. describe actions, thoughts, and feelings.

These standards will be met when given as part of the instructions. [We will discuss how both versions of storytelling (flipbooks and six word stories) have limits to what can be told and how it can be told and whether or not the words clarified and contributed or changed our perception of what happened in the flipbook] and example on how to write a six word story, what should be included in the story, and while students complete the writing/story assignment, edit and peer edit their stories, create final drafts, present them to the class and explain what flipbook or image from the flipbooks inspired the tale and how/why they were inspired.

3

- RL.3.7. Explain how specific aspects of an illustration contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting) and vice versa.
- W.3.3. Write narratives to develop real or imagined experiences or events using effective technique and descriptive details.

These standards will be met when given as part of the instructions. [We will discuss how both versions of storytelling (flipbooks and six word stories) have limits to what can be told and how it can be told and whether or not the words clarified and contributed or changed our perception of what happened in the flipbook] and example on how to write a six word story, what should be included in the story, and while students complete the writing/story assignment, edit and peer edit their stories, create final drafts, present them to the class and explain what flipbook or image from the flipbooks inspired the tale and how/why they were inspired.

4

RI.4.7. Interpret information presented visually and/or orally, (e.g., an illustration and a story inspired by, or written about it) and explain how the information in the image contributes to an understanding of the text [and vice versa.]

W.4.3. Write narratives to develop real or imagined experiences or events using concrete words and phrases and sensory details to convey experiences and events precisely.

These standards will be met when given as part of the instructions. [We will discuss how both versions of storytelling (flipbooks and six word stories) have limits to what can be told and how it can be told and whether or not the words clarified and contributed or changed our perception of what happened in the flipbook] and example on how to write a six word story, what should be included in the story, and while students complete the writing/story assignment, edit and peer edit their stories, create final drafts, present them to the class and explain what flipbook or image from the flipbooks inspired the tale and how/why they were inspired.

Peers will have to explain whether or not both seeing the inspiration and hearing the story increase their understanding rather than just seeing one/hearing one.

5

RI.5.6. Analyze multiple accounts of the same event or topic (ex. an illustration or story prompt, or flipbook), noting important similarities and differences in the point of view they represent.

W.5.3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, ex. use concrete words and phrases and sensory details to convey experiences and events precisely.

These standards will be met when given as part of the instructions and example on how to write a story, what should be included in the story, and while students complete the writing/story assignment, edit and peer edit their stories, create final drafts, present them to the class and explain what flip book or image inspired the tale and how/why they were inspired.

Students will compare and contrast different stories that were inspired by the same flipbook/prompt and see whether they mostly were the same, had similar elements or were wildly different from each other.

6

W.6.3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and d) Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events.

R.L.6.4 b) analyze the impact of a specific word choice on meaning and tone.

These standards will be met when given as part of the instructions. [We will discuss how both versions of storytelling (flipbooks and six word stories) have limits to what can be told and how it can be told and whether or not the words clarified and contributed or changed our perception of what happened in the flipbook] and example on how to write a six word story, what should be included in the story, and while students complete the writing/story assignment, edit and peer edit their stories, create final drafts, present them to the class and explain what flipbook or image from the flipbooks inspired the tale and how/why they were inspired.

While writing, peer editing, and/or self-editing, they will look closely at word choice, especially as the word count is so limited, and see how using those words or substituting a different one might change or impact the story.

7

W.7.3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, ex. use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.

RL.7.5.. Analyze how a story's form or structure (e.g., flip book or six word story format) contributes to its meaning.

These standards will be met when given as part of the instructions. [We will discuss how both versions of storytelling (flipbooks and six word stories) have limits to what can be told and how it can be told and whether or not the words clarified and contributed or changed our perception of what happened in the flipbook] and example on how to write a six word story, what should be included in the story, and while students complete the writing/story assignment, edit and peer edit their stories, create final drafts, present them to the class and explain what flipbook or image from the flipbooks inspired the tale and how/why they were inspired.

We will discuss, after the examples in the unit and also after reading our group stories, whether or not and how the flip book and six word story formats impact the way a story is told or its meaning.

8

RL.8.3. Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).

W.8.3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and d) Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.

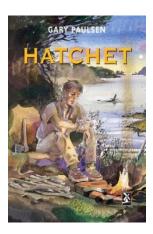
These standards will be met when given as part of the instructions. [We will discuss how both versions of storytelling (flipbooks and six word stories) have limits to what can be told and how it can be told and whether or not the words clarified and contributed or changed our perception of what happened in the flipbook] and example on how to write a six word story, what should be included in the story, and while students complete the writing/story assignment, edit and peer edit their stories, create final drafts, present them to the class and explain what flipbook or image from the flipbooks inspired the tale and how/why they were inspired.

While peer editing and self editing students will look at how the elements of the story and/or flipbook impact the meaning or what we get from the stories and whether or not those choices work or need adjustment to make the story even more impactful.

Part One: Day Three

Stranded!

Humans like to think that once they've climbed a mountain, they've somehow conquered it. But they can only ever be visitors to this alien, frozen world. The mountain environment is one of the harshest places for humans to try to survive due to their elevation and terrain. Mountains are defined as landmasses with a summit above 2,000 ft and can be very dangerous places. Students will discuss that lower temperatures and poor weather are more likely at higher altitudes, so there is a significant risk of hypothermia, frostbite, and altitude sickness, while snow, ice and precipitous terrain present further hazards. Students will discover that our survival may depend on our ability to descend to areas with better prospects of survival and rescue.



Option: "Hatchet" by Gary Paulsen: Present excerpts of the book Hatchet orally (pages 22-28 and 43-48) to the students with major emphasis on the dramatic aspects of a plane crash in the Canadian mountains along the river systems and Brian Robeson's assessment of what he has on hand to make survival possible.



Survival of the Fittest

Dear Students,

In an effort to supplement my teaching salary, I have volunteered all of you to be part of a new reality show called Survival of the Fittest. The producers of the show and I are very excited to begin this endeavor.

Survival of the Fittest is a game where you are a member of a team and need to only stay alive for the duration of the show in order to win. There will only be one winning team in the game. Winners will receive bragging rights along with extensive knowledge of survival in the mountains.

In order to survive, you will need supplies such as water, food, weapons, and a bit of good luck.
Other teams may try to sabotage you, so be alert. Anything could happen in this game as the "game-creators" are attempting to put on a good show and boost television ratings.

To begin, you will be flown to a remote location in the mountains without any communication devices available to you. You and your team will have the opportunity to earn supplies to help keep you alive. Guard these supplies with your life, as you may need them to survive.

I wish you luck and may the best team win!

Sincerely,







Image Credit: Karl Simon. Copyright 2010. All Rights Reserved.

http://karlsimon.blogspot.com/2010/02/plane-crash.html

Your Instructor

Idea Source: Nora Oswald at http://simplifyingradicals2.blogspot.com/2012/11/survival-of-fittest.html. Accessed 11.25.14 Copyright 2012. All Rights Reserved!

Break your class into teams of three (four if necessary).

The students are trying to stay alive in the wilderness while the show producers (game-creators) are trying to raise their television ratings.

You will need to create tickets that each have 3 questions (ex. math problems [ex. addition, subtraction, multiplication, division, order of operations, polynomials; etc.], survival questions from past and present weeks, and/or physical fitness) challenges: one easy question or challenge (level 1), one medium question or challenge (level 2), and one hard question or challenge (level 3).

Give a question card/challenge card that the students have to complete individually, or as a group, depending on how you want to structure the game. Remember, each question card should have three questions of different difficulty level. The problems that they students get correct dictate what supplies they receive in order to survive on the island.

Every time that the students get a question correct or complete a physical challenge, they have the opportunity to earn supplies.

For each level 1 question a student gets right, he receives that many level 1 supplies (water, granola bar, or beef jerky). You may want to copy the level 1 supplies on colored paper, ex. pink paper.

Teacher Tip

If using math problems and practicing math skills during the game on the challenge cards:

For whatever skills you want students to practice, give a very short reminder lesson, do several sample problems, and then allow the students to work for a few minutes in their teams to complete a few practice problems. Each member of the team has to make sure everyone knows the lesson because their survival depends on it. Circulate around the room answering questions only if no one in the group is able to come up with the answer.

For each level 2 question a student gets right, he receives that many level 2 supplies (rabbit snare, belt, or sleeping bag). You may want to copy the level 2 supplies on colored paper, ex. yellow paper.

For each level 3 question a person gets right, he receives that many level 3 supplies (good luck charm, bow and arrow, or medicine). You may want to copy the level 3 supplies on colored paper, ex. green paper.

Tape a magnet (or a piece of tape) to each team marker and display the markers where all students can see them. Have all students start at a certain health level (ex. you might use 8 levels) and place their markers next to the number 8.

If you do not have a magnetic white board, you can simply write the team numbers on the board and erase the team number and rewrite it as necessary.

Once the teams started collecting supplies, the fun begins. Randomly pick one of the "Survival Scenario" cards and read it to the students. A card might read that the game-creators are playing with the temperatures at night and a team would need a sleeping bag in order to stay healthy. Each team needed to hand in a sleeping bag or lose a health level.

Note: Alliances and rivalries may start to form and an atmosphere of 'survival' will be in the air!

Sample 3 Level Card [High School Student] Questions using Polynomials (pre-calculus):

Level 1:

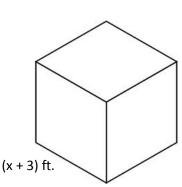
Simplify:
$$(4ab - 2x) + (8ab + 10x)$$

Level 2:

Simplify:
$$(8x^2 + 4x) + (2x + 1)(3x - 2)$$

Level 3:

Write and simplify a polynomial that represents the volume of this cube.



Notes and Suggestions:

- The good luck charm can be used in place of any supply.
- Try to create teams that are equal in ability. For instance, if you make a team of 4, try to have two weak students in that same team.
- When picking game-creator cards, pick enough cards to keep the teams moving down health levels, but not enough that a team actually "dies" until the end.
- Use 8 health levels when playing the game. Ex. Healthy—Level One, Dead—Level Eight
- Post the health level of each team. Ex. Tape a grid up on the board and use a magnet for each team. When a team went down a health level, move their magnet down on the grid.
- Allow teams to form alliances and share supplies. What ill likely happen is trading of supplies rather than giving of supplies. That is fine.
- Give each team an envelope or zip top bag to keep their supplies.
- Glue the game-creator cards to index cards to make them sturdier.
- The game ends when there is only one team alive. In the case there is a tie, then you could have two winners.
- This game can be structured so it can be continued over multiple days, ex. in the last few minutes of class, or during extra time.

Sample Survival Scenario Cards

You haven't eaten in days. Use two pink food cards or one yellow rabbit snare card to bring up your energy.	You haven't eaten in days. Use two pink food cards or one yellow rabbit snare card to bring up your energy.
You haven't eaten in days. Use two pink food cards or one yellow rabbit snare card to bring up your energy.	You haven't eaten in days. Use two pink food cards or one yellow rabbit snare card to bring up your energy.
The game-creators are playing with temperature. It is 33° and the temperature is dropping quickly, all water sources are freezing and you are at risk of dehydration. Drink one of your bottles of water.	The game-creators are playing with temperature. It is 33° and the temperature is dropping quickly, all water sources are freezing and you are at risk of dehydration. Drink one of your bottles of water.
The game-creators are playing with temperature. It is 33° and the temperature is dropping quickly, all water sources are freezing and you are at risk of dehydration. Drink one of your bottles of water.	The game-creators are playing with temperature. It is 33° and the temperature is dropping quickly, all water sources are freezing and you are at risk of dehydration. Drink one of your bottles of water.
Night falls. The game-creators want to make things more interesting and have again plummeted temperature to below freezing. Use a sleeping bag to keep warm.	Night falls. The game-creators want to make things more interesting and have plummeted temperature to below freezing. Use a sleeping bag to keep warm.

You fell asleep and awoke to voices approaching. You quickly climb a tree, but the wandering teams make camp under the tree for the night. Use a belt to keep secure as you sleep.	You fell asleep and awoke to voices approaching. You quickly climb a tree, but the wandering teams make camp under the tree for the night. Use a belt to keep secure as you sleep.
The game-creators have released the wild animals. They chased you into a corner and there is no escape, you need to fight. Use one of your weapons.	The game-creators have released the wild animals. They chased you into a corner and there is no escape, you need to fight. Use one of your weapons.
Someone disturbs a bee's nest. You instantly run, but a few have detected you. You leap into a frozen stream, but many bees sting you. You begin to hallucinate. You need medicine.	Someone disturbs a bee's nest. You instantly run, but a few have detected you. You leap into a frozen stream, but many bees sting you. You begin to hallucinate. You need medicine.
While you are sleeping you hear other teams getting close. You need to run away to stay alive. Pack all your things in your sleeping bag and run. If you don't have a sleeping bag, you will lose two of your supplies while running.	While you are sleeping you hear other teams getting close. You need to run away to stay alive. Pack all your things in your sleeping bag and run. If you don't have a sleeping bag, you will lose two of your supplies while running.

Because you must run a lot you tie many of your supplies to your belt. Use your belt. If you don't have a belt, you will lose two of your supplies while running.	Because you must run a lot you tie many of your supplies to your belt. Use your belt. If you don't have a belt, you will lose two of your supplies while running.
You run into another team and are unable to outrun them. Use a weapon to escape.	You run into another team and are unable to outrun them. Use a weapon to escape.
You walked into a game-creator snowstorm that made you ill. You need medicine.	One of your wounds is infected. You need medicine.

Sample Survival Supplies

Water Bottle	Water Bottle	Water Bottle
Water Bottle	Water Bottle	Water Bottle
Water Bottle	Water Bottle	Water Bottle
Water Bottle	Water Bottle	Water Bottle
Granola Bar	Granola Bar	Granola Bar
Granola Bar	Granola Bar	Granola Bar
Granola Bar	Granola Bar	Granola Bar

Granola Bar	Granola Bar	Granola Bar
Beef Jerky	Beef Jerky	Beef Jerky
Beef Jerky	Beef Jerky	Beef Jerky
Beef Jerky	Beef Jerky	Beef Jerky
Beef Jerky	Beef Jerky	Beef Jerky
Rabbit Snare	Rabbit Snare	Rabbit Snare
Rabbit Snare	Rabbit Snare	Rabbit Snare

Rabbit Snare	Rabbit Snare	Rabbit Snare
Rabbit Snare	Rabbit Snare	Rabbit Snare
Sleeping Bag	Sleeping Bag	Sleeping Bag
Sleeping Bag	Sleeping Bag	Sleeping Bag
Sleeping Bag	Sleeping Bag	Sleeping Bag
Sleeping Bag	Sleeping Bag	Sleeping Bag
Belt	Belt	Belt
Belt	Belt	Belt

Belt	Belt	Belt
Belt	Belt	Belt
Bow and Arrow	Bow and Arrow	Bow and Arrow
Bow and Arrow	Bow and Arrow	Bow and Arrow
Bow and Arrow	Bow and Arrow	Bow and Arrow
Bow and Arrow	Bow and Arrow	Bow and Arrow
Medicine	Medicine	Medicine

Medicine	Medicine	Medicine
Medicine	Medicine	Medicine
Medicine	Medicine	Medicine
Good Luck Charm	Good Luck Charm	Good Luck Charm
Good Luck Charm	Good Luck Charm	Good Luck Charm
Good Luck Charm	Good Luck Charm	Good Luck Charm
Good Luck Charm	Good Luck Charm	Good Luck Charm

Team	Team	Team
1	2	3
Team	Team	Team
4	5	6
Team	Team	Team
7	8	9

Standards Alignment Day Three: K-8

K

- SL.K.2. Confirm understanding of information or the topic under discussion by asking and answering questions about key details.
- SL.K.3. Ask and answer questions in order provide information, clarify answers, and demonstrate understanding of the topic under discussion.

These standards will be met when students participate and are required to answer questions, solve problems, and participate in challenges in the Survival of the Fittest review, math skills practice, and physical challenge game.

1st

- SL.1.2. Ask and answer questions about key details and demonstrate understanding of the topic under discussion.
- SL.1.4 Present information, opinions, findings, and/or supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

These standards will be met when students participate and are required to answer questions, solve problems, and participate in challenges in the Survival of the Fittest review, math skills practice, and physical challenge game.

2nd

- W.2.8. Accurately recall relevant information from experiences and discussions to answer a question.
- SL.2.2. Recount or describe key ideas or details from information presented orally or through other media and demonstrate understanding of the topic under discussion and mastery of key skills.

These standards will be met when students participate and are required to answer questions, solve problems, and participate in challenges in the Survival of the Fittest review, math skills practice, and physical challenge game.

3rd

- W.3.8. Accurately recall relevant information from experiences and discussions to answer a question.
- SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

These standards will be met when students participate and are required to answer questions, solve problems, and participate in challenges in the Survival of the Fittest review, math skills practice, and physical challenge game.

4th

- W.4.8. Accurately recall relevant information from experiences and discussions to answer a question.
- SL.4.4 4. Present information, findings, opinions, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and situation.

These standards will be met when students participate and are required to answer questions, solve problems, and participate in challenges in the Survival of the Fittest review, math skills practice, and physical challenge game.

5th

- W.5.8. a) Recall relevant information from experiences and accurately summarize or paraphrase information.
- SL.5.1 d) Review key ideas and key elements of the topic or problem under discussion and draw and express conclusions and demonstrate understanding of information and knowledge gained from the discussions.

These standards will be met when students participate and are required to answer questions, solve problems, and participate in challenges in the Survival of the Fittest review, math skills practice, and physical challenge game.

6th

- RI.6.7. Recall information presented in different media or formats (e.g., visually, quantitatively, as well orally) to demonstrate a coherent understanding of a topic, problem, or issue.
- SL.6.4 4. Present information, findings, opinions, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and situation.

These standards will be met when students participate and are required to answer questions, solve problems, and participate in challenges in the Survival of the Fittest review, math skills practice, and physical challenge game.

7th

- W.7.1 b) Support claim(s) and opinions with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic, problem, or information under discussion.
- SL.6.4 4. Present information, findings, opinions, and supporting evidence such that the line of reasoning can be followed and the organization, development, and style are appropriate to task, purpose, and situation.

These standards will be met when students participate and are required to answer questions, solve problems, and participate in challenges in the Survival of the Fittest review, math skills practice, and physical challenge game.

8th

- W.8.1.a Support claim(s) and opinions with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic, text, problem, or information under discussion.
- SL.8.4. Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning.

These standards will be met when students participate and are required to answer questions, solve problems, and participate in challenges in the Survival of the Fittest review, math skills practice, and physical challenge game.

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Part One: Day Four

Yoo Hoo! Big Summer Blowout!

Students will watch the 'Big Summer Blowout' clip from Frozen

https://www.youtube.com/watch?v=y w105aWPNY and discuss what equipment Anna had with her, and what she asked for/needed in order to safely travel on the mountain (and why she wanted it) when the weather changed and why she didn't want swimming suits or sun balms.

Also, discuss with students what kind of gear Kristoff had and what he used to stay safe on the mountain.

[Kristoff places his supplies down on the desk]

Oaken: That'll be forty.

Kristoff: Forty?! No, ten!

Oaken: Oh, dear, that is no good. See, this is from our vinter stock, vhere the supply and demand have a big problem.

Kristoff: You want to talk about a supply and demand problem? I sell *ice* for a living! [Anna looks at his sled parked outside, loaded with ice blocks, in the midst of all that snow]

Anna: Ooh, that is a rough business to be in right now! I mean, that is really[notices that Kristoff is staring down at her; Anna clears her throat,
nervously] That's unfortunate.

Oaken: Still forty, but I vill throw in a visit to Oaken's Sauna! [He gestures to the family currently occupying the sauna] Hoo-hoo! Hi, family!

Sauna Family: Hoo-hoo!

Kristoff: Ten's all I've got! Help me out!

Oaken: Okay. [He positions the carrots in front of the other supplies] Ten vill get you this, and no more.

Why was there a problem with supply and demand and why was the winter gear so much more expensive?

What would be the differences/challenges you might face that would be different between winter and summer, or fall and spring?



(Olaf's summer song might inspire students to start thinking... http://www.youtube.com/watch?v=UFatVn1hP3o)

The laws of supply and demand control what we pay for goods and services

(From the Social Studies Help Center online at http://www.socialstudieshelp.com/Economics_SupplyDemand.htm)

Understanding the laws of supply and demand are central to understanding how the capitalist economy operates. Since we rely on market forces instead of government forces to distribute goods and services there must be some method for determining who gets the products that are produced. This is where supply and demand come in. By themselves the laws of supply and demand give us basic information, but when combined together they are the key to distribution in the market economy... price.

What is demand?

Demand is comprised of three things.

- Desire (What did Kristoff desire?)
- Ability to pay (Could he pay?)
- Willingness to pay (Was he willing to pay the price that Oaken wanted?)

It is not enough to merely want or desire an item. One must show the ability to pay and then the willingness to pay. If all three conditions are not me then the demand is not real. This, by the way, is the purpose of advertising. While many may want a product it is quite another to be willing to pay. Advertising attempts to move a consumer from mere want to action. These day even condition two may not stand in the way of a consumer. With the advent of credit cards we are able to purchase products without the current ability to pay. Many stores and car dealers even offer on the spot credit though the interest rate may be quite high.

What factors alter your desire, willingness and ability to pay for products? Some factors include consumer income, consumer tastes the prices of related products like substitutes for that product of items that may complement that product.

The Law of Demand:

Simply put, the higher the price, the lower the demand and the lower the price, the higher the demand.

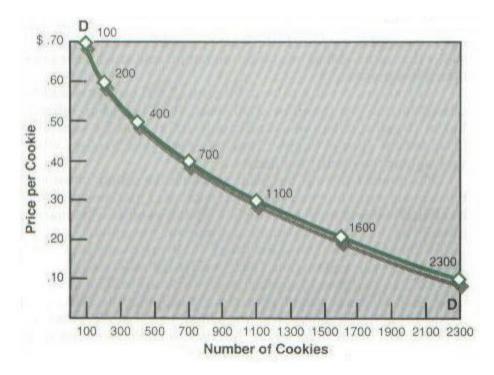
In numbers it would look like so:

Demand Schedule for Cookies

At a price of	Consumer will buy
.70 cents	100 cookies
.60	200
.50	400

.40	700
.30	1,100
.20	1,600
.10	2,300

Economists also like to look at things graphically. It enables us to see the quantity and price on a limitless scale. To do this we plot what is known as a demand curve. The price is always on the vertical axis and the quantity is always on the horizontal axis. If we were to plot our points and draw a demand curve for the cookies it would look like this.



Law of Supply

Quantity supplied is directly proportional to price. (Why were Oaken's prices so high?...low supply) Clearly the law of supply is the opposite of the law of demand. Don't these both make sense to you? Consumers want to pay as little as they can. They will buy more as the price drops.

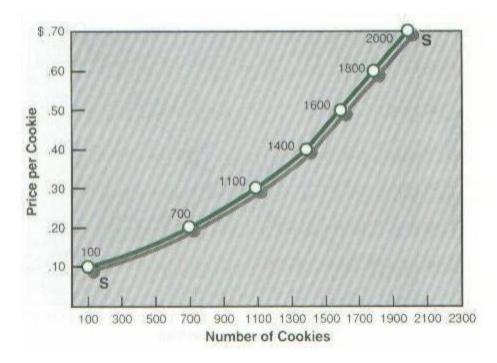
Sellers, on the other hand, want to be able to charge as much as they can. They will be willing to make more and sell more as the price goes up. This way they can maximize profits.

Numerically a supply schedule would look like this:

At a price of	Consumer will buy
.70 cents	2,000 cookies
.60	1,800
.50	1,600
.40	1,400

.30	1,100
.20	700
.10	100

The accompanying supply curve would be drawn like so:



Market or Equilibrium Price:

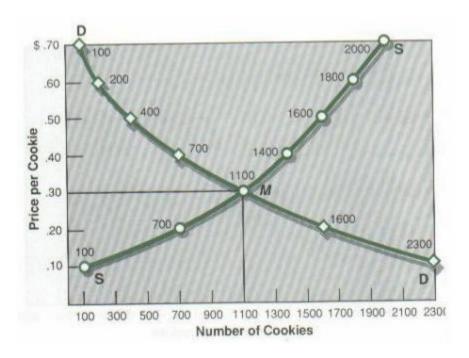
Now that we have covered both demand and supply we have to combine both together. The place where what sellers are willing to sell for and buyers are willing to buy for is called market or equilibrium price. This is the price the product will sell for.

Price is negotiation between the buyers and the sellers. To figure out price one has to law the supply and demand next to each other.

Supply and Demand of Chocolate Chip Cookies

Students will buy	At a price of	Sellers will offer
100	.70 cents	2,000
200	.60	1,800
400	.50	1,600
700	.40	1,400
1,100	.30	1,100
1.600	.20	700
2,300	.10	100

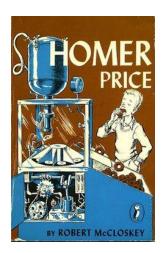
When we then plot and draw both curves together we are able to see the market price of the product. (The market price for cookies in this graph is 30 cents. The quantity sold and bought is 1100 cookies.)



So, basically... Supply and Demand: as price decreases, the quantity demanded (amount people want to buy) increases.

Icy Exchange: You Supply the Demand!

Option: Some resources that may help solidify the concepts already discussed as well as what happens in this activity are *Lemonade for Sale* by Stuart J. Murphy (helps make graphs clear), and the funny and memorable short story "The Doughnuts" from *Homer Price* by Robert McClosky. In an oral discussion ask



students to describe what happened when Homer lowered the price of fresh doughnuts? (*People wanted to buy more doughnuts.*) Explain **supply and demand,** which states that as price decreases, the **quantity demanded** (*amount people want to buy*) increases. At higher prices, consumers will buy less. For example, if the price of computer games decreases, more people will want to buy computer games (*quantity demanded increases*).

Note: This activity focuses on the law of demand. In the story, advertising and the \$100 prize do not change the *quantity* demanded. They change demand. Only a change in price changes the quantity demanded.

Notes: For this activity, it is very important that you become familiar with the Ice Block Exchange activity before conducting it. Make sure to explain the different scenarios at the end of the activity to (1) aid in comprehension of the economic concepts of supply and demand and (2) provide relevance to the activity.

Ice blocks from the mountains we are traveling through are valued all over the world. Buyers and sellers meet weekly at the ice exchange here.

Steps for Starting the Game/Explaining the Rules:

- 1) Explain to students that today you will ask them to participate in a simulation of a competitive market. Students will be buyers and sellers both. Handout the Buyers and Sellers Surplus Chart and tell students that they will be filling this out as they go. Explain that they will use both sides, depending on whether or not they are a buyer or seller for each round.
- 2) Tell Students what they're selling/buying: In this scenario it is a rare ice block (feel free to elaborate or switch the good).
- 3) Divide students into buyers and sellers according to the scenarios. Have students go to each side of the room. Hand-out "ice blocks" to sellers. These can be pennies, marbles, sugar cubes etc.
- 4) Explain that a minimum price will be set for sellers. Sellers MAY NOT sell an ice block for under this price.
- Sellers must try to sell their product for as much as they can, if they sell above the minimum price they get a seller's surplus (profit). Their goal is to make as much surplus (profit) by negotiating a favorable price.
- 5) Explain that maximum price will be set for buyers. Buyers MAY NOT buy for over this price.
- The buyer must try to buy ice blocks as cheaply as they can; if they pay less than their maximum price then they get a consumer surplus. Their goal is to make as much surplus (profit) by negotiating a favorable price.
- 6) Tell students that a deal is reached after a price is agreed upon and an exchange of the good has been made and handshakes have been exchanged. The buyer and seller should then report to the

recorder (teacher) who will write their price on the board. Then record the information for selling/ buying on your worksheet at your desk. Don't tell people what your max or minimum price was until after we talk about the round.

- 7) Show students where and how to fill out their worksheets to record buying/selling prices and surplus for each round.
- 8) All sessions last for 5 minutes.
- 9) A maximum and minimum will be set for each round. Buyers and sellers SHOULD NOT tell anyone (sellers can't tell the buyers and buyers can't tell the sellers) the maximum or minimum. This should be stressed.
- 10) Buyers and Sellers my not buy or sell from the same person in any round.
- 11) If students do not make a sale or buyers are unable to buy an item, the entire maximum (for buyers) or minimum (for sellers) must be deducted from their surplus.

How to calculate a buyer's surplus:

buyer surplus (profit) = buyer's max price – sold price

How to calculate a seller's surplus:

seller's surplus (profit) = sold price – seller's minimum price

For Instructors:

Scenario 1: Equilibrium

There should be (assign) an even number of buyers and sellers for this round.

Seller's minimum: \$30

Buyer's maximum: \$130

Scenario 2: Equilibrium

Buyers and sellers should switch roles. There should be an even number of buyers and sellers for this round.

Seller's minimum: \$25

Buyer's maximum: \$125

Scenario 3: Supply Decrease (Price Increases, Quantity Decreases)

In this round, a mysterious warm spell hits and much of the ice melts. Roughly 1/3 of the class should be sellers. 2/3 should be buyers.

Seller's minimum: \$25

Buyer's maximum: \$125

Scenario 4: Demand Decrease (Price Decreases, Quantity Increases)

The price of frozen fruit (a substitute) decreases. Everyone rushes out to buy frozen fruit and nobody is left to buy ice. Roughly 2/3 of the class should be sellers. 1/3 should be buyers.

Seller's minimum: \$125

Buyer's maximum: \$25

Feel free to add additional rounds if desired.

REVIEW QUESTIONS

1.	What was your grand total surplus?
2.	Was it positive or negative?
3.	What occurred to the equilibrium price? Did it increase, decrease, or fluctuate over time?
4.	Did you sell or buy every single trading session? If you didn't explain why you couldn't do so.
5.	What sorts of strategies worked when trying to sell for a higher price?
6.	What strategies worked when trying to buy at a lower price?
7.	If supply is low (more buyers than sellers) what happens to the price of the pearls? Did

8.	If demand is low (more sellers than buyers) what happens to the price of the pearls?
	Did they increase or decrease?

TRADING RECORD (version 1)

Round 1

Note. For round 1, the surplus will be equal to total because we just starte	round 1, the surplus will be equal to total because we just s	started
--	---	---------

Max/min price	Price you paid/sold for	Surplus	Total				
Equilibrium price = (average price for sold ice blocks)							
Round 2							
Max/min price	Price you paid/sold for	Surplus	Total				
Fauilibrium price =	(average	orice for sold salt blocks)					
	(uverage	orice for sold suit blocks,					
Round 3							
Note: Remember, the surplus can be negative if you don't make a trade.							
Max/min price	Price you paid/sold for	Surplus	Total				
Equilibrium price = (average price for sold salt blocks)							
Round 4							
Max/min price Total	Price you paid/bought	for Surplus	Grand				
Equilibrium price =	(average	orice for sold ice blocks)					

TRADING RECORD (version 2)

Name:

Seller Surplus			Buyer Surplus
(sellers use this side)			(buyers use this side)
	Round	1	
(price) – (minimum) = surplus	OR		(maximum) – (price) =surplus
	Round	12	
(price) – (minimum) = surplus	OR		(maximum) – (price) = surplus
	Round	13	
(price) – (minimum) = surplus	OR		(maximum) – (price) = surplus
	Round	14	
(price) – (minimum) = surplus	OR		(maximum) – (price) = surplus

TOTAL	SURPLUS	:

(add up your earnings columns from **both** sides)

Standards Alignment Day Four: K-8

K.2.01 Describe potential costs and benefits of personal economic choices in a market economy.

K.2.02 Give examples of the interaction of businesses and individuals (ex. buyers and sellers) in a market economy.

These standards will be met during the discussion and game.

For example: Students will need to describe what would happen if a seller decides only to sell an item for a very high price if there was a glut of those items on the market (ex. they might not sell any of their goods), or if their item was rare (ex. they might/might not get what they ask for) and how that relates to real life situations (ex. they release a limited amount of fancy new phones, or tickets to an event, what happens?) What might happen if a buyer doesn't want to pay the minimum price (they might not get their item), or what happens if they pay the high price right away? (ex. They have the item but if they wait they could have saved money and got it for a lower amount of money.)

1st

1.2.01 Describe the potential costs and benefits of personal economic choices in a market economy.

1.2.03 b. Differentiate between consumers and producers or buyers and sellers.

These standards will be met during the discussion and game.

For example: Students will need to describe what would happen if a seller decides only to sell an item for a very high price if there was a glut of those items on the market (ex. they might not sell any of their goods), or if their item was rare (ex. they might/might not get what they ask for) and how that relates to real life situations (ex. they release a limited amount of fancy new phones, or tickets to an event, what happens?) What might happen if a buyer doesn't want to pay the minimum price (they might not get their item), or what happens if they pay the high price right away? (ex. They have the item but if they wait they could have saved money and got it for a lower amount of money.)

2nd

2.2.01 Describe the potential costs and benefits of personal economic choices in a market economy.

2.2.02 Give examples of the interaction of individuals and businesses (ex. buyers and sellers) in a market economy.

These standards will be met during the discussion and game.

For example: Students will need to describe what would happen if a seller decides only to sell an item for a very high price if there was a glut of those items on the market (ex. they might not sell any of their goods), or if their item was rare (ex. they might/might not get what they ask for) and how that relates to real life situations (ex. they release a limited amount of fancy new phones, or tickets to an event, what happens?) What might happen if a buyer doesn't want to pay the minimum price (they might not get their item), or what happens if they pay the high price right away? (ex. They have the item but if they wait they could have saved money and got it for a lower amount of money.)

3rd

3.2.02 b. Identify examples of scarcity.

3.2.02 c. Explain how supply and demand affects the price of a good or service.

These standards will be met during the discussion, game, and post game discussion. They will apply what they learned from the stories, real life experiences, and their own experiences with the game to be able to explain scarcity and how supply and demand control prices both in the game and in real life.

4th

4.2.03 b. Describe the relationship of price to supply and demand

4.2.03 c. Use economic concepts such as supply, demand, and price to help explain events.

These standards will be met during the discussion, game, and post game discussion. They will apply what they learned from the stories, real life experiences, and their own experiences with the game to be able to explain scarcity and how supply and demand control prices both in the game and in real life.

5th

5.2.03 a. Explain how supply and demand affects production and consumption

5.2.04 Understand the patterns and results of trade.

These standards will be met during the discussion, game, and post game discussion. They will apply what they learned from the stories, real life experiences, and their own experiences with

the game to be able to explain scarcity and how supply and demand control prices both how much of something is made, how much it costs, and how many are bought.

6th

6.2.01 a. Explain the relationship of supply and demand.

6.2.03 b. Analyze how supply and demand impact the cost for goods and services.

These standards will be met during the discussion, game, and post game discussion. They will apply what they learned from the stories, real life experiences, and their own experiences with the game to be able to explain scarcity and how supply and demand control prices both in the game and in real life.

7th

7.2.02 a. Recognize that resources, goods, and services are exchanged worldwide.

7.2.03 e. Analyze issues related to the availability, use, distribution, and trade of goods.

These standards will be met during the discussion, game, and post game discussion. They will apply what they learned from the stories, real life experiences, and their own experiences with the game to be able to explain scarcity and how supply and demand control prices, availability, use, and trade both in the game and in real life.

8th

- 8.2.01 a. Describe the role that supply and demand, prices, and profits play in determining what is produced and/or distributed in a competitive market system.
- 8.2.02 8.2.04 Understand the interactions of individuals and/or businesses (ex. buyers and sellers) in a market economy.

These standards will be met during the discussion, game, and post game discussion. They will apply what they learned from the stories, real life experiences, and their own experiences with the game to be able to explain scarcity and how supply and demand control prices, what is made, and how buyers and sellers behave both in the game and in real life.

Vocabulary Guide:

K

- Wants
- Basic Needs

- Human
- Illustrator
- Beginning
- Ending
- Compare
- Value

1

- Value
- Property
- Greater than
- Less than
- Balance
- Total
- Character
- Setting
- Illustrate

2

- Economy
- Consumer
- Producer
- Events
- Goods
- Services
- Outcome
- Main Idea
- Plot

3

- Product
- Scarcity
- Economy
- Character
- Setting
- Effect
- Conclusion
- Barter

- Cause
- Effect

4

- Supply and demand
- Trade
- Relationship
- Drawing conclusions
- Making inferences
- Chance
- Audience
- Proofread

5

- Visual
- Image
- Prompt
- Point of view
- Model
- Theme
- Narrative
- Main ideas
- Significant

6

- Variable
- Dependent
- Point of view
- Interdependence (economic, ex. buyers need sellers and vice versa)
- Cause and effect
- Power
- Relevant

7

- Capitalism
- Impact
- Interaction with texts
- Juncture

- Mood
- Inferences
- Viewpoint
- Climax
- Nuance
- Characteristic

8

- Exchange
- Commerce
- Sensory detail
- Tension
- Mood
- Tone
- Variation
- Function

Sample Supply List

Day One:

- Movie clips
- Paper
- Art supplies such as crayons, markers, construction paper, etc.

Day Two:

- Movie clip
- Post-it notes or index cards
- Pencils
- Markers or other drawing tools
- Paper
- Sample flip books
- Sample six word stories

Day Three:

- Printouts of Survival Scenario & Supplies Cards, etc.
- Chosen questions, physical activities, and math problems made into 3-Level Challenge Cards
- Optional: Baggies for teams to keep their 'supplies' in

Day Four:

- Movie clips
- Printouts
- Items to be 'ice cubes,' ex. sugar cubes or marbles
- Pencils
- Optional: Books such as *Homer Price* by Robert McClosky