A Hero’s Journey

Science | Invisible Ink
In most stories, the hero must leave or find secret messages to complete their mission. Use the attached invisible ink recipes to create your own secret messages.

Write | The Chase

A man sprints down the sidewalk, looking over his shoulder. Half a block away, someone is chasing and gaining on him.

Create a piece of art or a story that illustrates this idea.

Points to think about:
• Why is the man running? Does he run well? Is he out of shape, or does he look like he could pull away?
• Does he get away?
• Is he a bad guy? What has he done?
• Is he a good guy and running from evil?
• Who is chasing him? What does that person look like? Is this person good or bad?

Just for Fun | Psychic Ability Test
Is one of your friends or family psychic? You can do this activity in person or virtually!

How To Play:
Attached are eight different problems to solve. If the sheets are already double sided, there should be words on one side and a picture on the other. If they are not double sided, use cereal boxes or construction paper as backings. Glue or staple the words on one side and the corresponding picture on the other side. You can try this out on family members and have them try it out on you. Hold up a page with the words facing the opposite person and have them tell you what picture is on the back from the list of words. See how many you can get right! Remember, this isn’t science- it’s only for fun.

Wellness | The Hero in Me
What you need:
• Scissors
• cup or bowl

Use the attached sheet of “hero” words for this activity. Cut out the words, fold them and put them in a bowl or cup. Pull out a word. Think about a situation in which you have been or could be a hero to others using that word as a descriptor.
Invisible Ink Recipes

Recipe #1: Lemon Juice

What you need:
- lemon juice
- paper (try different types of paper, e.g., copy paper, index cards, construction paper)
- small bowl
- cotton swab or Q-tip
- alternate item: salt
- alternate item: wax crayon

What you do:
1. Put a little lemon juice in a small bowl.
2. Dip your cotton swab or Q-tip in the “ink” and write your message (do not use too much liquid!). Allow ink to dry completely.
3. To reveal the message, simply heat the paper by holding it up to a light bulb. Hold it close, but do not touch it to the bulb; we don’t want a fire! The acidic parts of the paper (lemon juice) should turn brown. You can also iron the paper and reveal the message, which should appear brown.

Alternate instructions: While ink is still wet, shake salt on the message. Brush off salt only after the message is fully dry. To reveal the message, rub a wax crayon over the paper.

Recipe #2: Milk

What you need:
- milk
- small bowl
- cotton swab or Q-tip
- paper (try different types of paper, e.g., copy paper, index cards, construction paper)

What you do:
1. Put some milk in a small bowl.
2. Dip your cotton swab or Q-tip in the “ink” and write your message, being careful not to use too much liquid. Allow it to dry completely.
3. To reveal the message, simply heat the paper by holding it up to a light bulb (or iron it). The message should appear a faint brown.
Words for the “Hero in Me” Activity

Brave

Courageous

Helpful

Kind

Noble

Friendly
Psychic Test #1

- Broom
- Mop
- Bucket
- Vacuum
- Duster
Psychic Test #1
Psychic Test #2

baseball
basketball
football
soccer ball
volleyball
Psychic Test #2
Psychic Test #3

Strawberry

Banana

Apple

Grape

Orange
Psychic Test #3
Psychic Test #4

Cow
Goat
Horse
Pig
Chicken
Psychic Test #4
Psychic Test #5

White House
Statue of Liberty
Lincoln Memorial
Washington Monument
Supreme Court
Psychic Test #5
Psychic Test #6

Shark
Lobster
Fish
Octopus
Jellyfish
Psychic Test #6
Psychic Test #7

Airplane
Train
Car
Boat
Bus
Psychic Test #7
Psychic Test #8

Piano
Saxophone
Drums
Guitar
Flute
Psychic Test #8
New Twist on an Old Tale

Art | Book Cover Creation
We really do judge a book by its cover sometimes. Redesign the cover of your favorite book to capture what the story is really about.

Write | Rewrite the Ending
Sometimes we don’t always agree with how a story is wrapped up. Choose a fairy tale with an ending that didn’t satisfy you. Rewrite the ending to that fairytale.

Science | Solar Water Distiller
Make a solar water distiller! Instructions attached.

Wellness | Mini Zen Garden
Create a peaceful and relaxing miniature Zen garden.

Materials needed:
- Empty Altoids tin or similar container; a small plastic container or a cardboard jewelry box would work as well
- sand
- Small stones
- plastic fork
- Markers (optional)
- stickers (optional)

Fill your container with sand, and add a few small stones. You may wish to collect sand and/or stones outside (check for bugs!) Use your plastic fork as the rake moves the sand and stones back and forth.
Solar Distiller Worksheet

Find out if you can distill clean water from salt water or muddy water!

**What you need:**
- 2 large plastic containers ("stills")
- clear plastic wrap
- masking tape
- 2 small rocks
- 2 small glasses
- 2 tablespoons of dirt
- 2 tablespoons of salt
- water

**What you do:**
1. Fill both containers with one inch of water.
2. Mix dirt into one container; salt into the other.
3. Place one empty glass upright in the middle of each plastic container.
4. Cover both plastic containers tightly with plastic wrap and seal them with tape.
5. Place a small rock in the middle of the plastic wrap over the glass but not touching the glass inside.
6. Place the stills in a sunny spot for two hours.
7. Describe what you find in the glasses, if anything, after two hours.
Common Threads

Art | Tornado in a Jar

What you need:
- Glass jar with lid such as a clean spaghetti sauce jar (an empty water bottle works, too)
- Water
- Dish soap
- Hot glue gun (optional)
- Glitter (optional)

Directions:
1. Fill a glass jar with water, leaving about 2 inches on the top.
2. Squirt in some dish detergent.
3. If you wish, you can add a pinch of glitter, for visibility.
4. Cap the jar tightly. You may wish to glue it closed.
5. Rotate the jar to create the tornado.

WHAT'S HAPPENING? Friction
As you twist the jar, the water inside up against the glass is pulled along due to its friction against the glass walls. The fluid toward the inside takes longer to get moving. But eventually both the glass jar and the fluid are spinning as you rotate the jar. When you stop rotating the jar, the fluid inside keeps spinning. A mini twister can be seen for just a few seconds when the outer fluid slows down and the inner fluids continue to spin rapidly.

Wellness | Challenges to Change Your Life

What you need:
- paper or notebook
- pencil

Many people have a list of the things they want to do with their lives. Some lists are vague mental ideas, and other lists are specific and enumerated. Brainstorm the general topic of “things you want to accomplish or experience in life.” Journal over the summer about the activities you have completed from your list.

Examples for your list:
- read everyday for an hour
- call an old friend or two... or more
- write a letter to a family member
- give up TV for a week
- introduce yourself to a new person each day
- laugh until you cry
- go to a local art or historical museum
- memorize a poem and share it with someone
- visit a relative’s grave
- learn to cook one good meal
Science | Forensics- Fingerprints

This is an exercise to show how fingerprints can be lifted off of objects and how to analyze them.

**What you need:**
- scissors
- pencils (dark lead)
- paper (plain)
- fingerprint sample handouts (attached)
- clear “objects” such as picture frames, paperweights, vases, knick-knacks, etc.

**Instructions:**
The first thing you should do is gather a few objects that have enough flat surface space to lay a piece of tape flat. For example, the side of a drinking glass, the flat side of a remote control, computer mouse, or a book. Wipe them all down and let them dry. The oils in our hands is what allows our fingerprints to attach to different objects. Touch all of the objects with your hands.

Now, practice fingerprinting by rubbing a soft lead pencil on a piece of paper, placing your fingertip on it without pressing too hard, and then touching your fingertip on the STICKY side of a piece of tape. Then tape the tape to a fresh piece of paper. Your fingerprint will show clearly, as long as you didn’t rub your finger sideways, press too hard on the pencil markings, or otherwise smear the image. Once you have practiced a few times, go ahead and fill out the Personal Fingerprint Identification Form; then determine which type fingerprint each of your fingers has.

Now you are ready to “lift” the fingerprints from your objects to match them to your fingers. You can also try doing this with other family members to see if you can pick out someone’s distinct print on an object.

**Write | Personal Time Capsule**
Time capsules allow us to look back in time and discover what was different or the same from our current lives. Make one of your own to look at in the future. Instructions attached.
Personal Time Capsule

What you need:

- Containers with lids (metal coffee cans with lids, large plastic coffee cans with screw-on lids, plastic containers (Rubbermaid, etc.) with lids, an empty oatmeal container, an empty shoebox, an empty cereal box without the bag.)
- Glue or duct tape
- Markers
- Various personal items (see below)

In this activity, you can capture and preserve current parts of your life for the future. The capsules don’t need to be buried, but store them in a safe place until the time comes to open them.

Decorate the time capsules (if you want to). Paint the outside, or use permanent markers (it depends on what the container is made of). Tape or glue a piece of paper with the date/year of when the time capsule should be opened. Ten years is recommended so you can see how you have changed growing into adulthood. Fill your time capsule. There is a list of suggested items below.

Sealing your time capsule can be done in a variety of ways, but using duct tape (clear tape won’t stay sticky long enough) or gluing the lids closed will work. If the capsule is a Rubbermaid-type box, just snapping the lid closed should be enough. However, it is very tempting to open a time capsule that isn’t sealed!

Open in ten years!

Possible items to place in time capsule

- Letter to your future self—describe yourself, your hopes for the future, and any predictions you might have for your life.
- Photos of friends, family, pets, house, school, car—whatever is important to you at this time.
- Newspaper articles showing current events or trends. Both local and world news.
- Letters—ask your parents to write a letter to you, talking about the current day or about what they hope for the future. Friends can also contribute letters. These should be sealed unread and placed in the time capsule.
- Filled journals or paper calendars.
- Price tags of items/store receipts (to see how prices change).
• Items that are important to you—toys or trinkets. Suggestion: Label these items because you might not remember why it was important to your teenage self.

• Movie ticket stubs.

• Lists!

**Here are some suggestions:**

- Favorite songs
- Favorite outfits
- Favorite things in your room
- Favorite friends
- Favorite foods
- Favorite books
- Favorite movies
- “Things you hope to do before you die” (Bucket list)
- List of what you hated about being a teenager
- Websites you look at every day

*Do not put anything in that will rot or leak (favorite candy bar for example).*
Fingerprint Patterns:
http://www.reachoutmichigan.org/funexperiments/agesubject/lessons/handouts/print_patterns.html
Personal Fingerprint Identification
Magical Creatures

Art | Monstrous Construction

What you need:
- assorted junk
- masking or duct tape

Everyone has unwanted junk around their house. Find some of that junk and use it to build your own monster. Some examples: a large swatch of fake fur, sticks, plastic tubing, newspaper, bubble wrap, aluminum foil—anything! Use your imagination to create your own monster and give it a name!

Science | Monstrous Makeup

Did you know you can use many things from around your house to make monster makeup? You don’t need to have all of the ingredients, and you can even come up with your own concoctions!

Attached: Makeup Recipes.

Write | Write Your Own Ghost Story

Maybe your town has an old tale about ghosts that you want to put down in writing or maybe you’ve heard about ghost sightings. Ghost stories are fun to write but they have distinctive features. Use the attached guide to establish some common features of ghost stories. You can use the graphic organizer to brainstorm ideas.

Be creative!

Wellness | Sea Creature Art

Did you know that the definition of meditation is to engage in contemplation or reflection? When you are creating art, you are reflecting and contemplating your creation. You are meditating!

What you need:
- Paint/Charcoal/Markers/Colored Pencils
- Paper
- Pencil
- Paintbrushes

Mythological sea creatures have fascinated people for centuries. They are depicted in many stories and art around the world. The goal of this activity is to create a sea creature-themed piece of artwork. When your library re-opens ask your librarian if you can have your art put on display. Attached: sheet with sea creature examples to get your imagination going!
Monstrous Makeup

You can make yourself into a ghoulish monster with these homemade makeup recipes. This can be messy, so you may want to wear an old tshirt.

**What you need:**
- red poster paint
- ketchup
- flour
- corn syrup
- food coloring, various colors
- cotton balls
- unflavored gelatin
- craft sticks
- rubber or latex gloves
- cold cream
- waterproof tape
- water

**What you do:**
1. To make fake blood, there are three options. Each has its own pros and cons.

   - **Red poster paint:** will dry, won’t run, looks fairly realistic and should wash off with soap and water
   - **Ketchup:** will not dry, will run, looks very realistic and should wash off with soap and water
   - **Flour, corn syrup and red food coloring:** Mix one teaspoon of flour with one teaspoon of corn syrup and add two or three drops of red food coloring. Will not dry, won’t run and should wash off with soap and water.

2. For fur, tear a cotton ball into strips about 3–4” long. Dip a craft stick into corn syrup and dab it onto your skin where you want the fur to be. Carefully place the strip of cotton over the corn syrup. Start at the top of your face and work your way downward and outward. Pat the cotton down. Avoid getting the corn syrup on your fingers as it will mat the hair. You can also lightly paint the “fur” with brown and black poster paint before or after you put it on.

3. Scars are a must for your average monster. Be careful, because these scars can stick to hair. A very light coat of cold cream rubbed on before the scar is made may help with removal. Put a teaspoon of unflavored gelatin in a small bowl and mix in a teaspoon of very hot tap water. Add 3 or 4 drops of food coloring to the gelatin. Stir the gelatin and food
coloring. When it is cool to the touch, scoop some up and put it on your cheek with your finger or a craft stick. If you want your scar to be larger, add another layer on top after the first one has dried. Red and blue together make a convincing scab; green or yellow look a little more gangrenous. Layer the colors for best effect. Remove by peeling it off.

4. For a ghoulish handshake, lightly cold cream your hands and put on a pair of slightly large, flesh colored rubber or latex gloves. Have a helper pour some water into the space remaining in the glove. Seal the gloves to your wrists using waterproof tape. Keep in mind that some people are allergic to latex gloves.

5. For a temporary hair color, dip cotton balls or sponges into food coloring. Brush onto hair. This works best with fair hair, and can last several days.
Monsterous Makeup Recipes

✦ **Scars and Sores**
Combine pink or green tissue with a little corn syrup. Apply to skin.
Add red food coloring to make it bloody.

✦ **Hairy!**
Use a bit of hair and attach with double-stick tape.

✦ **Blood**
Mix corn syrup and red food coloring.
Add a bit of water and blue or green coloring.

✦ **Gore**
Make blood as described above; use with peanut butter on skin.

✦ **Wrinkles**
Add powder to area, draw dark lines, and blend into surrounding area.
Add more powder to look dry and old.

✦ **Gray hair**
Sprinkle baby powder throughout hair.
Tips for Writing a Ghost Story

Setting
The setting of your tale can be traditionally spooky, creepy, or mysterious—an abandoned house or cemetery or subway at night. It can also be an ordinary place at first glance—a classroom, a church, a bowling alley, but with the suggestion that something is not quite right. This can add to the sense of creepiness, suggesting that ghosts can appear anywhere.

Characters
Create many likable characters so that your ghost has some context. Focusing too much on the ghost as the main character may not interest your readers. You want readers to be intrigued by the ghost but not overexposed to it. Show your characters through what they do, what they say, how they feel, what they look like, and how other characters react to them.

Mystery
The problem in the story must have a mysterious element to it. The problem could be that the characters are trying to figure out what the ghost wants, or they are figuring out how to get rid of the ghost. Readers will want to travel with the characters on the journey to solve the mystery. The mystery can also be something missing, a murder, or an unsolved problem from the past.

Emotion
In a ghost story you want your readers to have the emotion of fear. The characters in your story should be experiencing it so your reader can too. Show, don’t tell about, the emotions of your characters mainly from their actions.

Plot
Your ghost story needs an engaging plot. It needs a beginning, middle, and an end that will make your reader not want to put your story down.

Adapted from:
www.chow.com/how_2193971_write-ghost-story.html#ixzz138I8KMz and erinarticles.com/How-to-Write-a-Great-Ghost-Story&id=112208
How to Write a Ghost Story

Graphic Organizer

Atmosphere:

Characters:

Mystery:

Emotion:

Plot:
Capricorn
Mermaids
Sea serpents
Mermen
Sea monsters
**Once Upon a Time**

**Art** | Straw Pan Pipe
Instructions attached.

**Write** | Haiku
A Haiku is a form of poetry that does not rhyme and has only seventeen syllables divided into three lines:

Line One: five syllables
Line Two: seven Syllables
Line Three: five syllables

This topic sounds vague, so it could be interpreted however you want. Write a haiku where you “imagine your story.”

**Wellness** | Juggling
Juggling is one of the jester’s best-known skills. There are instructions included with this packet. Once you have mastered the technique, share your new skill with a friend or neighbor! Instructions attached.

What you need:

- juggling supplies: small balls, oranges, etc.


**Music** | Create a Playlist
Do you have a favorite book? Create a playlist for this book.
Make It: Pan Pipe

What you need:

• 8 straight straws
• Scissors
• Ruler
• Masking tape
• Marker

Instructions:

1. Measure and cut your straws to these lengths:

7.7 inches, 6.7 in., 6.1 in., 5.7 in., 5.1 in., 4.5 in., 3.9 in., and 3.7 in.

2. Label the straws 1–8, with 1 being the longest one.

3. Tape the straws together in order from longest to shortest. To space the straws, you can tape some of the cut pieces as spacers between the long straws.

4. To play: Hold the pipe vertically below your lips. Blow across the tops of the straws.

Here are some songs to try:

**Twinkle, Twinkle Little Star**

```
1 1 5 5 6 6 5
4 4 3 3 2 2 1
5 5 4 4 3 3 2
5 5 4 4 3 3 2
1 1 5 5 6 6 5
4 4 3 3 2 2 1
3 2 2 3 2 1
```

**Mary Had a Little Lamb**

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3 2 1 2 3 3 3
2 2 2 3 5 5
3 2 1 2 3 3 3
3 2 2 3 2 1
```

What’s Happening?

Vibration = Sound

As you blow across the straw, the air in the straw vibrates. You can change the pitch by changing the length of each straw. Each straw produces a note; the longer the straw, the lower the note.
Write | Picture Stories
What you need:
- paper
- scratch paper
- cartouche pattern (attached)
- Black Sharpie or black pen
- attached hieroglyphics alphabet chart

For hundreds of years, scholars struggled to solve the mystery of Egyptian hieroglyphics. In 1799, the Rosetta Stone was found. The Stone proved to be the key to deciphering the hieroglyphics, since it had the same passage of text in Greek, hieroglyphics, and another script called demotic script. Since scholars knew Greek, they were able to use the Rosetta Stone to decipher one of history’s mysteries—Egyptian hieroglyphics.

Take the opportunity to learn about one of the oldest forms of writing by designing your own cartouche. A cartouche is a long oval that contains the name of a pharaoh. Hieroglyphics can run from top to bottom, right to left, or left to right. Any figures in the cartouche should face the direction the hieroglyphics start. Use the hieroglyphics to write your name or motto with a black pen or a black Sharpie. Color in the hieroglyphics to achieve a richer look (somewhat reminiscent of illustrated manuscripts from medieval times). Practice on the scratch paper first.
You can exchange messages using the hieroglyphics with a friend or family member then try to decode them.

Science | Naked Humpty Dumpty
What you need:
- Vinegar
- Glass jar(s) with lid
- Raw uncracked egg(s)
- Spoon
Note: It takes about two days for the full effect of this experiment to take place.

What you do:
1. Carefully place the egg in the glass jar, cover it with vinegar and screw the lid on to avoid accidental spills.
2. Bubbles will begin to form as the chemical reaction occurs. (The acetic acid reacts with the calcium carbonate in the eggshell and releases carbon dioxide gas that you see as the bubbles).
3. After 12 to 24 hours, check to see if the shell has dissolved.
4. Pour the liquid out of the jar and carefully remove the egg with the spoon (or simply pour it into your hand; the membrane is delicate and may break! You may want to experiment with two or more eggs and jars in case an egg breaks).
5. Gently rub off the powdery eggshell.
6. Refill the jar with vinegar and put the egg in the vinegar for another 24 hours. After this time, the egg is ready for some grossness! It becomes very rubbery, and you may want to experiment with dropping the rubbery egg from different distances. Soak it in food-colored water. You can experiment and leave the egg(s) out for about a week.

**WHAT'S HAPPENING? Chemical Reactions**
The vinegar causes a chemical reaction to break down the calcium carbonate of the egg shell, eroding it down to the egg membrane.

**Art | Design a New Dragon Species**
**You will need:**
- Attached sheets of dragon pictures for reference
- Pencil and paper
- Clay (optional)
- Construction paper

If using clay, cover your workspace with old newspaper, or work outside to limit mess and cleanup. Imagine a new species of dragon, then draw or model them. Don’t forget to give your new species a name!

**Wellness | Meditation**
**What you need:**
- Mat, towel, or blanket: Meditation is a uniquely personal experience, with the purpose of helping channel self-awareness in a positive direction. To meditate is to turn inward and concentrate on your inner self. Our secular society is turning to it more and more as a way to escape some of the stress of our busy world.
- To meditate, you must get away (even just briefly) from the rest of the world. Turn off your technology (cell phone, computer, music, etc.) to minimize interruptions.
- Have a place to meditate. You might choose to set aside a special place just for meditation in your home. Weather permitting, meditating outdoors can also be effective as long as you have a peaceful spot.
- Try to ensure your meditation spot is a comfortable temperature; not too hot and not too cold. Likewise, wear loose, comfortable clothing.
- You do not have to sit cross-legged, although that is the typical posture for meditation. The key is to find a way to sit so that you are comfortable and do not have to shift or wiggle around. Sit on your mat or towel. You can also sit on a chair.
- What do you think about? To start with, simply concentrate on your breathing—if you find your mind racing, you can count with your breaths, one on the inhale and one on the exhale. Breathe in through the nose and out through your mouth.
- When you feel relaxed, this is the time to begin self-reflection. Listen to your inner mind. Watch your thoughts come and go. Do not try to direct them, just observe them and try not to get caught up in any one thought. If this happens, concentrate anew on your breathing.
- A good beginning length of time for meditation is 15–20 minutes.
- When you are done with your meditation, be sure to get up slowly and with calm and gentle movements.
Cartouche Pattern
Hieroglyphics Alphabet Chart