

# Deseret News

# CONNECT 1 2 3

Your Family • Community • World

## Staying safe in the winter

Did you ever wish you had a magic flying sleigh, and soar over the ice and snow and traffic? The weather can make life more difficult, but winter is also a great time to have fun outdoors. Here are some ways to be prepared and stay safe:



**Nadine Wimmer,**  
KSL News

■ **Be seen.**

Be sure you can be seen when crossing streets and parking lots. Drivers aren't always paying attention.

White clothes and light

colors are easier to see than dark ones. You can also get reflective tape that shines when headlights hit it. You can put it on your winter coat and backpack.

■ **Wear a light.** If you're going to be riding a bike, be sure to have lights. Even if you are just riding around your neighborhood you need a headlight and a tail light. Your bike should also have reflectors on the spokes. You can put a reflector on your backpack and shoes or hat, too.

■ **Watch your step.** The trouble with ice is that you can't always see it. So step carefully. Watch for sand and loose gravel on the sidewalk and in the crosswalk, too.

■ **Watch the cars.** Even if you're at a stop sign or signal, wait before you jump off the curb. Be sure cars have stopped before you cross the street. There can be patches of ice or sand in the road and a car can just keep sliding.

■ **Watch for sunset.** Before you know it, sunny afternoons can turn into night this time of year. When it starts to get dark tonight, check the time. Then you'll be prepared if you are out in the late afternoon. Be safe, dress warmly and have fun this winter.

## Health and Fitness



### While you and your families are busy getting ready for the holidays,

it's important that you stock up on energy and nutrition from foods such as fruits and nuts rather than cookies and other not-so-healthy treats. Help Mom and Dad prepare for the holidays by making healthy treats for

them. The whole family can participate. You could even wrap some up for gifts!

– Jesse Shupe

DESERET NEWS ARCHIVES





### How the cash stole Christmas



Giving gifts can become costly and stressful this time of year. Instead of letting it steal your Christmas, take control to make the season what you want it to be.

#### Visualize your Christmas –

Think through what makes the holiday meaningful to you and what's important to you and your loved ones? Perhaps you can plan a group outing instead of giving gifts to all your friends this year. Suggest exchanging names among family members to help keep gift-giving affordable. Focus on making memories and celebrating special traditions.

**Make a plan** – Once you've determined what you want Christmas to look like, create a plan for shopping, budgeting and coordinating details. These ideas may help:

- Plan what you'll spend at the beginning of the month
- Check with your parents to see if you can earn extra money for presents
- Use an app, spreadsheet or online register to keep track of your daily spending
- Set aside funds for holiday fun and donations

**Stick to your plan** – You may become tempted to ditch your plan, but staying on track is worth it. Enjoy a wonderful Christmas season with a lot less stress and worry when you plan well and stay flexible.



SHUTTERSTOCK

## Snowshoe history

The “shoeski” was invented in 4,000 B.C. in Central Asia. It was a solid piece of wood with a crude binding. The first people that migrated over the Bering Land Bridge into North America used these.

Athaspaskan Indians of the northwest coast and the Algonquin Indians of the Great Lakes area perfected the laced-frame snowshoe which later developed into various styles. Materials were made from wood and animal hide or

sinew.

Each American Indian tribe had its own kind of snowshoe. Usually they were made of thin wood pieces tied with strips of leather. On the Western plains, Indians wore snowshoes to hunt buffalo in winter. Some snowshoes were 5 feet long. In recent years people have made snowshoes out of aluminum and different kinds of plastic.

SOURCE: <http://www.fs.usda.gov>

Snow is beautiful to look at and fun to play with. It's also hard to walk in.

When the snow is deep you can take one step and sink in up to your knees (or your neck). With snowshoes, you walk right on top of the snow. The snowshoes strap onto your boots and spread your weight over a wide area.

What's fun about snowshoeing is that you can hike all over no matter how deep the snow is. If you fall down, it doesn't hurt! You might walk right over a frozen stream, but beware of holes in the ice.

There's a lot to see when you snowshoe. Watch for tracks of birds and animals in the snow. Listen for winter birds looking for food in the bushes. You might hear a big black raven croaking as it flies overhead. Notice the buds on trees and shrubs waiting for spring.

Snowshoeing doesn't cost much. You can rent snowshoes in sizes for all ages.

There is another great thing about snowshoeing. Most of the energy you burn comes from you! To ski downhill takes a lot of gas and electricity. With snowshoes you just have to get to the snow. When a big snowstorm is coming, get your warm clothes ready. You might be able to head right out into the snow in your own neighborhood.







SHUTTERSTOCK

**W**hether you pump up your body's muscles or not, there's one muscle that you can't neglect — your body's pumper ... the old ticker ... your heart!

Some people think of the heart as the center of love, but the fist-sized muscle is more than a poster child for Valentine's Day. It pumps blood throughout 60,000 miles of vessels in your body. That's the distance from Miami, Fla., to Seattle, Wash. — 22 times! So what's the connection between fitness and the heart?

Any ticker has only so many ticks to give. In an average person's lifetime, a heart will beat about 2.5 billion times. (Don't worry if you've lost count already.)

During strenuous exercise, your heart might beat four, five, or up to seven times its normal rate to get blood to those muscles you're working. Does that mean you're running out of heartbeats as you're running down the field? Is it healthier to spend your life relaxing on the couch?

Nope, here's why: Just as your leg muscles perform better when they're stronger, your heart muscle can do its job — and use fewer beats doing it — when it is stronger.

You strengthen your heart with exercise, just like you strengthen any other muscle. You'll exert your heart during exercise, but a stronger heart is able to work more efficiently

the rest of the time. If you use fewer heartbeats every day, it stands to reason that your heart won't wear out as soon and you'll have more days to live.

This is Heart Work!

Strength is one measure of fitness: It's the ability to work hard in short spurts. Your heart muscle has to work 24/7 for maybe 100 years — not exactly a short spurt.

To strengthen your heart muscle, you need to do aerobic exercise. Aerobic means "with oxygen," and it's the type of exercise that involves a lot of breathing and heart beating — walking fast, swimming, or building a snow fort. There are three keys to building up your heart and lungs:

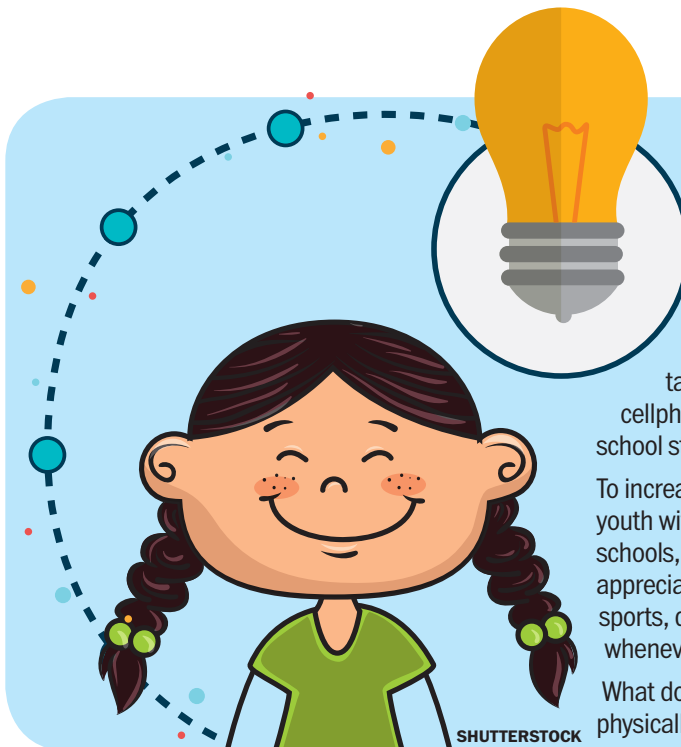
**Frequency** — Shoot for getting exercise most every day.

**Intensity** — You've got to work up a sweat.

**Time** — Start at 20 minutes and work up to an hour.

**■ Fitness is closely related to overall health. Find examples of news stories, opinion columns, and letters to the editor that deal with health issues. What is the main concern expressed? Do diet and exercise play a role?**

**newspaper activities**



SHUTTERSTOCK

## Think about it

Children and young adults need 60 minutes of moderate to vigorous activity every day to grow up to a healthy weight. Does that sound like a lot of time to you? Consider this: A person under the age of 18 spends an average of 7½ hours a day using entertainment media, including TV, computers, video games, cellphones and movies in a typical day. Only one-third of high school students get the recommended levels of physical activity.

To increase physical activity, the government recommends that youth with parental approval/supervision walk and bike ride to schools, parks, playgrounds and community centers to exercise, appreciate nature and have fun. Opportunities to participate in sports, dance or fitness programs should be taken advantage of whenever possible.

What do you think? What would it take for you to become more physically active? What kind of activities do you like to do?

## HOLIDAY TREATS

### Santa's flight mix

**Ingredients:**  
 3 cups Multi-BranChex  
 3 cups Multi-Grain Cheerios  
 1 cup pretzel sticks  
 ½ cup peanut butter  
 1 tablespoon butter or margarine  
 1 cup raisins  
 1 cup banana chips or salted dry-roasted peanuts.

### Directions:

1. Heat oven to 350°F. In a large bowl, mix cereals and pretzels; set aside.
2. In a microwave-safe dish heat peanut butter and butter until melted. Pour over cereal mixture, stirring until evenly coated. Spread in ungreased 13x9-inch pan.
3. Bake 10 minutes, remove from oven. Stir in raisins and banana chips. Spread on paper towels to cool. Store in air tight container. 18 servings (½ cup each)



— General Mills

### Berries in the Snow

#### Ingredients:

- 3 plain graham crackers, crushed
- 1 package unflavored Knox Gelatine
- 2 tablespoons sugar
- 1 cup boiling water
- 1 cup yogurt
- 2 cups of low-fat whipped topping
- 2 cup of berries, any kind that you would like

#### Directions:

1. Place graham cracker crumbs in the bottom of a pie plate.
2. In a large bowl combine gelatine and sugar add boiling water; stir until dissolved, add yogurt and fold in whipped topping, add berries, pour into pie plate.
3. Refrigerate 2-4 hours. Serve.

BOOK SHELF



**"The Kids Winter Handbook,"** by Jane Drake and Ann Love. Winter is a special time; as the snow begins to fall, it sets the stage for a whole array of wintry activities, like searching for special effects in the winter night sky, or sewing up a pair of cozy fleece mitts. Kids can learn to identify animal tracks or set up their own goofy winter Olympics.

**"Winter Lights: A Season in Poems and Quilts,"** by Anna Hines Grossnickle. These selections highlight holidays such as Santa Lucia, Hanukkah, Christmas Kwanzaa and Chinese New Year. Also, there are ideas for the winter solstice.

**"Seven Candles for Kwanzaa,"** by Andrea Davis Pinkney. Tells the background and meaning of this holiday.

**"Hanukkah, Schmanukkah!,"** by Esme Raji Codell. A take-off on Dickens' "Christmas Carol" using the Jewish holiday.

**"Kringle,"** by Tony Abbott and Greg Call. This fantasy combines magic, history and theology about where the modern Santa came from.

**"Fun-to-Make Crafts for Christmas,"** by Boyds Mills, publisher. Over 150 projects with patterns and construction tips.

**"Can You See What I See? The Night Before Christmas: Picture Puzzles to Search and Solve,"** by Walter Wick. Using a hunt-and-find format, Wick has hidden objects to search for. Fun for all ages.



# WORD SEARCH



Find the words below. They can be forwards, backwards and diagonal.

- |                  |                 |                 |
|------------------|-----------------|-----------------|
| <b>BERRIES</b>   | <b>HOLIDAYS</b> | <b>SANTA</b>    |
| <b>CANDYCANE</b> | <b>HOLLY</b>    | <b>SHOVEL</b>   |
| <b>COAT</b>      | <b>IVY</b>      | <b>SLED</b>     |
| <b>COCOA</b>     | <b>LIGHTS</b>   | <b>SNOW</b>     |
| <b>COOKIES</b>   | <b>MITTENS</b>  | <b>SNOWMAN</b>  |
| <b>DECEMBER</b>  | <b>NUTS</b>     | <b>SNOWSHOE</b> |
| <b>FIREPLACE</b> |                 |                 |

E O H S W O N S C C H H S S L  
 S N O W M A N A O C O C E H A  
 F I R E P L A C E L C J I O T  
 U L G D H G N Q I B I I K V N  
 C F I L B Q X D N H A I O E A  
 S A Q G F G A S B Y X V O L S  
 B N N X H Y L S E T L Y C O M  
 V T O D S T N N C I J L F M S  
 Q X F W Y E S I A M R N O D S  
 I F U V T C X Z N E R R U H C  
 M O B T S B A R B C P J E O C  
 A D I T T J X N I A C N A B J  
 A M U E U Q I E E S A T U C G  
 S L E D N L S R E B M E C E D

**spot the differences** Ten things have changed in the picture on the right. Can you find them?



**newspaper activities**

■ First, find the weather map in your newspaper. Then find where you live on the map. What will the weather be like for the week ahead? Is snow or rain in the forecast? Will the temperature be below freezing? What day has the lowest temperature?

**SPOT THE DIFFERENCES:** 1. The antenna on the top building is now red. 2. There is a building missing in the background. 3. The door on the orange building in front is now red. 4. The lower right-hand window is missing on the building in the lower left-hand corner. 5. The tree in the center has moved to the left. 6. A building in front has changed colors. 7. The woman on the left is missing. 8. The old man in the lower right-hand corner is now facing left. 9. The roof on the tall building on the right is a different color. 10. Another car has entered the picture on the left side.



**Read Today celebrates South Kearns Elementary**

The Read Today team and Chopper 5 made a stop at South Kearns Elementary School last month to celebrate their progress and impressive accomplishment. They took their school letter grade from an "F" to a "C" in just one year. Last year Principal Debbie Koji brought in new teachers for every class but three and worked to turn things around. The first step was new desks, new carpet, paint and lighting for the 65-year-old building. The next step was a strong focus on reading. Intervention programs and reading coaches were introduced while students were invited to check books out of the library to take home and read. The third turn around was home visits for every family that would allow one. The progress has given the whole school a boost of confidence and determination to excel. South Kearns has made more progress than any other school in the Granite District. Congratulations South Kearns! We hope to return again when you make your "A."



**CLASSROOM Connections**

If you would like to receive FREE copies of Connect 1•2•3 for your classroom, order on the Web at [deseretnews.com/nie](http://deseretnews.com/nie).

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**MOUNTAIN AMERICA CREDIT UNION**



# CONNECT 123

Your Family • Community • World

## ROBOTS

**A** ROBOT IS A machine that moves by itself to do its tasks. It also needs to be able to work without a person controlling it all the time. We often think of robots as resembling human beings, with eyes, hands and legs. While a robot does not need to look like a person, it must have some human abilities: movement, senses and intelligence.

You also have to be able to communicate with the robot to give it a new task or teach it a new skill. Robots also need to be able to sense the world around them and to respond to changes. If a robot is moving it needs to know how to change if it comes to a wall or how to crawl over a rock.

Robots today most often do jobs that are too dull, dirty or dangerous for humans. Robots are used in factories to build cars and put cookies together. You can buy simple robots that move

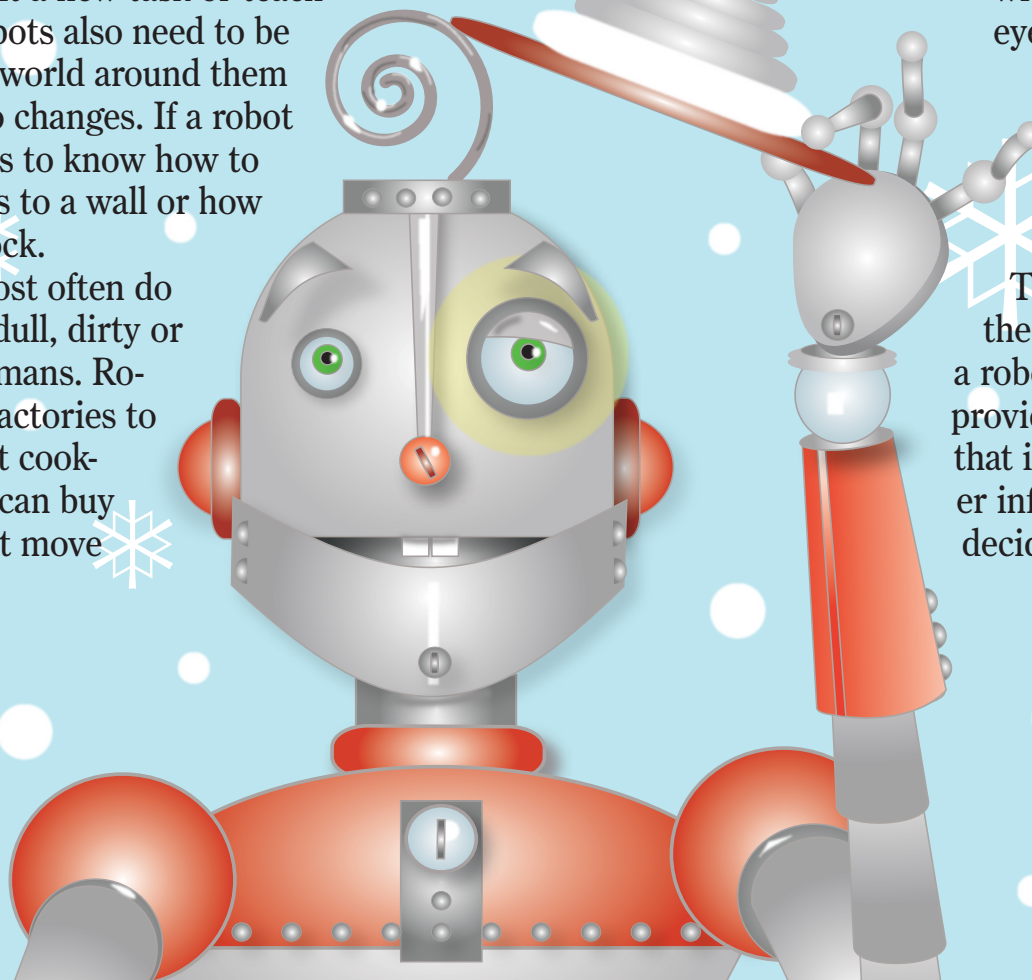
around your home and vacuum the floor or mow the lawn. Other kinds of robots clean up toxic waste, make maps of the ocean, dig rocks in mines or explore outer space.

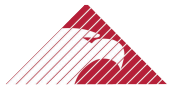
Robots that look like humans are part of the history of robots but also the future. Movies and science give us exciting pictures of metal monsters with flashing eyes. However,

we can still only dream of a robot that acts just like a person.

The computer is the key to building a robot because it provides the brain that it needs to gather information and decide what to do.

**ROBOTS PAGE 2**





**MOUNTAIN AMERICA**  
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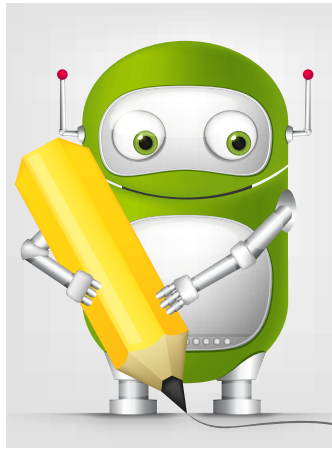


### What can I give?

During the holidays, it's easy to spend time daydreaming about what we will receive. But the joy of the season is often in what we give. This doesn't mean you have to spend a lot. In many cases, it's the thought that counts. Here are some inexpensive ideas to help you get into the giving spirit this year:

- Make something for a teacher or write a sincere note
- Look around your neighborhood for people who may need help with their yards
- Volunteer at a local food bank or shelter
- Help a parent around the house with everyday tasks and chores, or make and give certificates as a voucher for future service
- Give a grandparent or loved one a picture of you together and share how you feel about them
- Tell friends you want to host a small holiday party instead of exchanging gifts
- Start a tradition of getting fun, Christmas socks for your family members
- Give a Christmas ornament that reminds you of the other person

As you embrace the joy of giving, you will be reminded of the value of generosity not just during the holidays but all year long. Your life, and the lives of others around you, will be more beautiful as a result.



# Finish the story

**Choose one of the story starters below and complete the story. Is your story a mystery? A fairy tale, adventure or horror story? Include a robot in your story. Write it on a separate piece of paper if you need more room.**

**Starter one:** A bird whistled. Agnes followed the sound. She was stuck in the woods and her only hope was a bird. She would have laughed at herself if she wasn't so worried about being lost.

**Starter two:** Janice was grounded. She hated her parents. They were so unfair and always

seemed to be disappointed in her. They had grounded her for skipping school. The reality was Janice was afraid to go to school because she suspected the students were being replaced one by one with very realistic looking robots. Janice did not want to be replaced by a robot.

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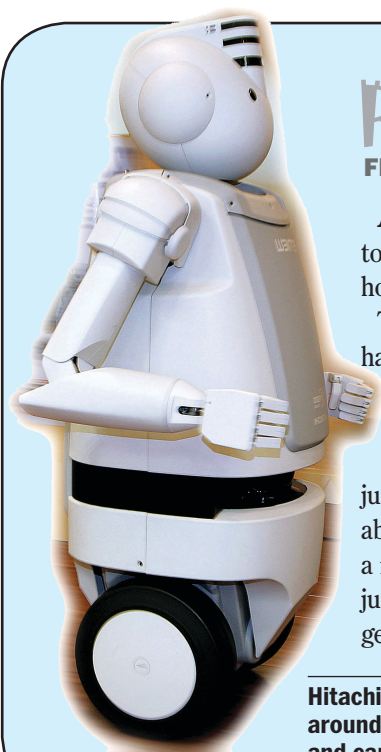
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More story starters can be found online at [www.creative-writing-help.com](http://www.creative-writing-help.com)

*The word "robot" came from a Czechoslovakian word "robota," which means forced labor.*



ASSOCIATED PRESS

## ROBOTS

**FROM PAGE 1**

A robot would need a gigantic brain to be able to really talk with us and to learn how to do many difficult jobs.

Think of all the problems a robot would have to solve to bring you a glass of juice. It would have to understand your language and what the command meant. Then it would have to know where to find the juice and how to get there, as well as be able to move. Then it would have to open a refrigerator and decide which carton was juice and not milk. The robot would have to get a glass and measure how much juice to

**Hitachi Ltd.'s humanoid robot Emiew can zip around on two wheels at the speed of a slow jog and can respond to simple voice commands.**

pour, carry the glass carefully and then find you again.

Look through the newspaper to find jobs that robots could do:

**Exploring the planets** – Robots called Rovers helped explore Mars, traveling over the surface to get soil samples, take pictures and send information back to Earth.

**Sports** – A robot beat the world's best chess player in 1999. But would you want to watch a robot play basketball?

**Medicine** – Robots help perform difficult surgery. As we learn from building robots we'll find better ways to help people who can't walk or have lost a hand.

**War** – Robots, instead of human soldiers, could help protect us.

**Security** – A robot could search a building at night and listen for sounds or sniff for explosives or gas leaks.



# I want to hold your hand

**PURPOSE**

To construct a robotic-like hand and to demonstrate how data are collected when using robotic technology.

**PROCEDURE**

1. To make the palm of the robotic hand, cut a piece of cardboard 10 cm x 10 cm (3.94 in x 3.94 in).
2. To make the fingers, cut three pieces of cardboard 2 cm x 9 cm. (0.78 in. x 3.54 in)
3. To make one of the fingers jointed, cut one of the cardboard pieces into three equal pieces. See diagram 1.

**Materials needed**

- Narrow rubber bands
- Drinking straws
- Cardboard
- Tape
- Scissors
- Nylon cord
- Centimeter ruler
- Pen

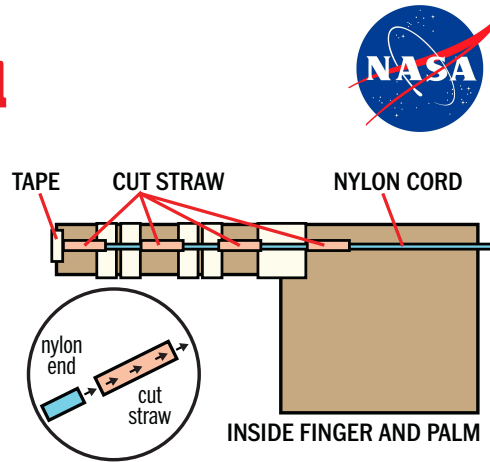


Diagram 5

16. Cut a piece of nylon cord 35 cm long. (13.77 in.)

17. Tape one end of the nylon cord over the end of the finger. See diagram 6.

18. Cut four pieces of straw 2 cm each. (0.78 in.)

19. Thread the pieces of straw onto the nylon cord.

20. Tape a piece of straw in the middle of each finger section.

21. Tape the last straw to the palm. See diagram 7.

22. Repeat steps 3-21 for the last two fingers.

23. Operate the hand by pulling the nylon cord.

24. You should be able to pick up an empty soda can or other lightweight objects.

**Tips:**

- May need to cut the tape pieces to make them thinner.
- Make sure the rubber bands are taped firmly. If there is any loose area, the hand will not work properly.

**Conclusion**

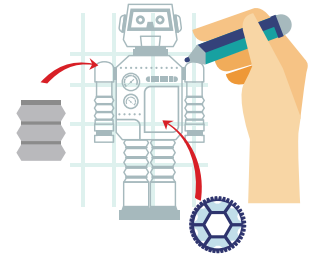
1. What items can you pick up with your robotic hand?
2. What would happen if you added more fingers?
3. What would happen if you added a thumb?

**Extension**

1. Fold your thumb in toward the palm of your hand. Wrap a piece of masking tape around your hand to immobilize your thumb. Now try to do various daily tasks without the use of your thumb. Were you able to tie your shoes, put a button through a buttonhole, or fasten a snap? Try holding a fork or spoon or peeling a banana. Can you catch a ball?

**Answer Key**

1. Answers will vary.
2. The hand should be able to pick up more items because more fingers will add strength.
3. Having an opposable, or moving thumb, allows us greater dexterity. Adding a thumb to the hand should allow you to pick up smaller items and complete tasks that require some skill.



## Can you ...

design a robot to do a task? How about a clothes-washing robot. The washing machine in the laundry or your home isn't a robot. It only does one thing and you have to decide everything for it. You have to put the clothes in, measure the soap, tell it how long to wash, and then start it. But could you design a robot that would keep all of your clothes clean? How would it know when your clothes needed washing? How would it find and gather them? Where would it get water and power and soap? What special abilities would it need? How would it use movement, senses and intelligence?

## ACROSTIC POEM

An acrostic poem uses the letters in a word to begin each line of the poem. All lines of the poem relate to or describe the main topic word.

**R** \_\_\_\_\_

**O** \_\_\_\_\_

**B** \_\_\_\_\_

**O** \_\_\_\_\_

**T** \_\_\_\_\_

**S** \_\_\_\_\_

Find and circle words on the front page of the Deseret News that describe what a robot is and what that robot can do.

Take letters from the headlines of the Deseret News to spell your robot's name

**newspaper activities**

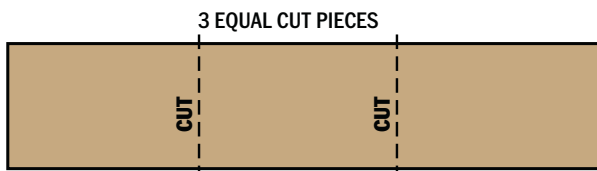


Diagram 1

4. Place the three equal finger pieces back together and use tape to reconnect them. Label one side of the taped finger "inside." See diagram 2.

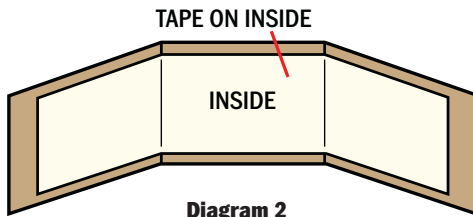


Diagram 2

5. Cut a rubber band 5 cm long. (1.96 in.)

6. Turn the segmented finger over so the "inside" is face down.

7. Put the rubber band across the middle of the first joint. See diagram 3.

8. Tape the rubber band on both sides of the joint, making sure to leave the ends of the rubber band untaped.

9. Fold the ends of the rubber band so that they rest on top of the tape and tape them firmly in place. See diagram 4. Taping prevents the rubber bands from slipping.

10. Repeat steps 5 through 9 for the second joint.

11. Tape the finger onto the palm with "inside" facing up.

12. Turn the hand over.

13. Cut a rubber band 5 cm long. (1.96 in.)

14. Put the rubber band across the last joint (touching the palm).

15. Repeat steps 8-9 for the last joint, connecting the finger to the palm. See diagram 5.

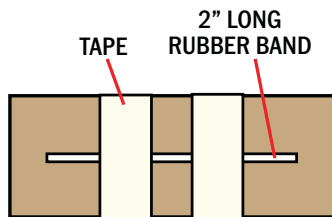


Diagram 3

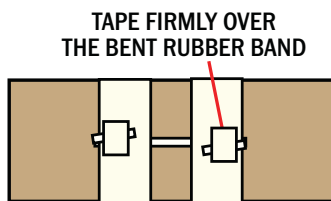


Diagram 4

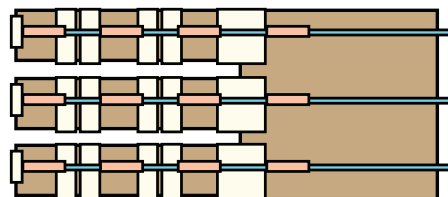


Diagram 6

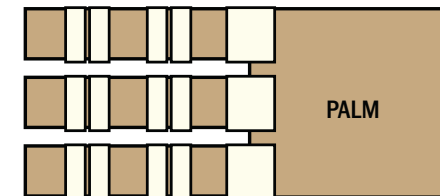


Diagram 7

# Leonardo da Vinci: robotic innovator

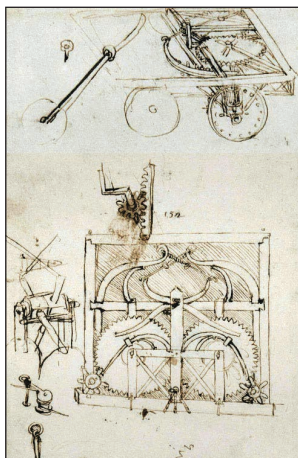
DA-VINCI-INVENTIONS.COM

With his innovative, engineering mind, Leonardo da Vinci had many ideas that employed the use of pulleys, weights and gears. Certainly, these three components were crucial to many of his automated inventions – including his versions of the clock, air conditioner and hydraulic power saw.

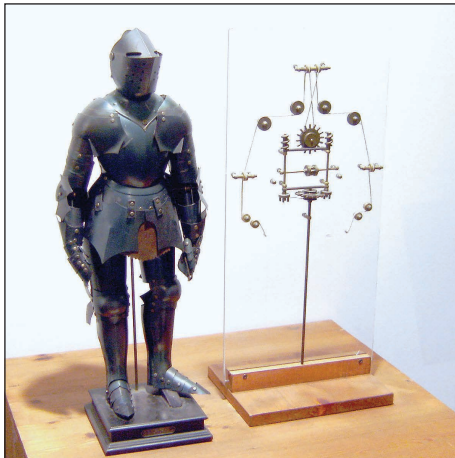
Da Vinci also incorporated these mechanisms into his self-propelled cart invention, which many people consider the very first robot. But da Vinci used the parts to create another robot too – his Robotic Knight. Though a full drawing of da Vinci's robotic knight has never been recovered, fragments detailing different aspects of the knight have been found scattered throughout his notebooks.

Designed for a pageant in Milan (which the Duke had put Leonardo in charge of overseeing), the Robotic Knight consisted of a knight suit filled with gears and wheels that were connected to an elaborate pulley and cable system. Through these mechanisms, da Vinci's robotic knight was capable of independent motion – sitting down, standing up, moving its head and lifting its visor.

Using several different da Vinci drawings as blueprints, roboticist Mark Rosheim built a prototype of the robotic knight in 2002, which was able to walk and wave. Rosheim noted how da Vinci had designed the robotic knight to be easily constructed, without a single unnecessary part. Rosheim also used da Vinci's designs as inspiration for robots he developed for NASA.

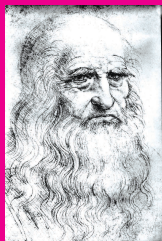


WIKIPEDIA  
Leonardo da Vinci's drawing for his self-propelled cart.



WIKIPEDIA  
Model of a robot with inner workings based on drawings by da Vinci.

## THE LEONARDO



Ready to be an inventor? Get hands on experience at Leonardo's Workshop, Leonardo's Studio and the Science Lab at The Leonardo  
209 East 500 South, Salt Lake City, Utah 84111  
[www.theleonardo.org](http://www.theleonardo.org)

## The 12 Days of Reading

This holiday season, spread the Christmas cheer by reading with your family. Read and mark your progress by coloring in an ornament each day on the tree below. 12 days of reading will result in a celebration from KSL

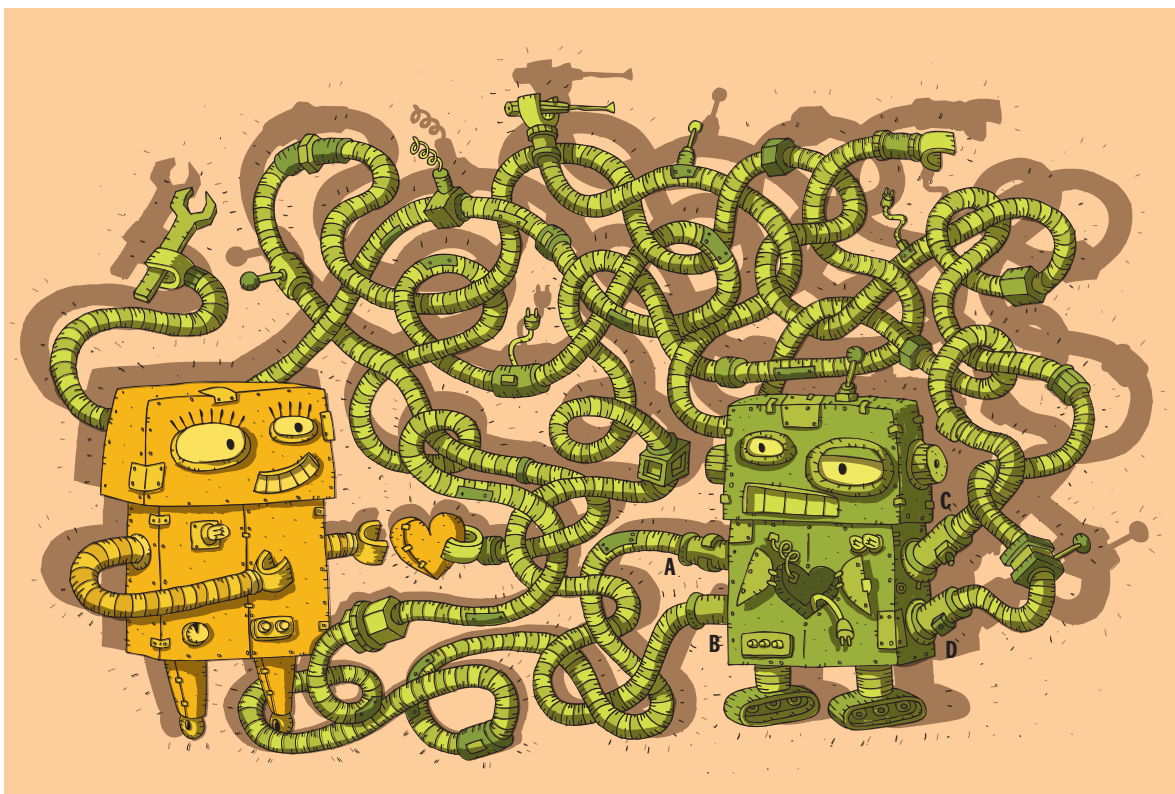
Read Today AmeriCorps.

Merry Christmas and Happy reading!



Read Today  
POWERED BY  
Deseret News

## Which robot hand is holding the heart?



DESERET NEWS

## CLASSROOM Connections

If you would like to receive FREE copies of Connect 1•2•3 for your classroom, order on the Web at [deseretnews.com/nie](http://deseretnews.com/nie).

Connect 1-2-3 is a FREE monthly educational section available only to schools through the Deseret News. Published by the Deseret News Newspapers in Education.  
**Connect 1•2•3**

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ANSWER: D



# Deseret News

# CONNECT 1 2 3

Your Family • Community • World

What is going on?

Write a caption for the photo below.



SCOTT G WINTERTON, DESERET NEWS

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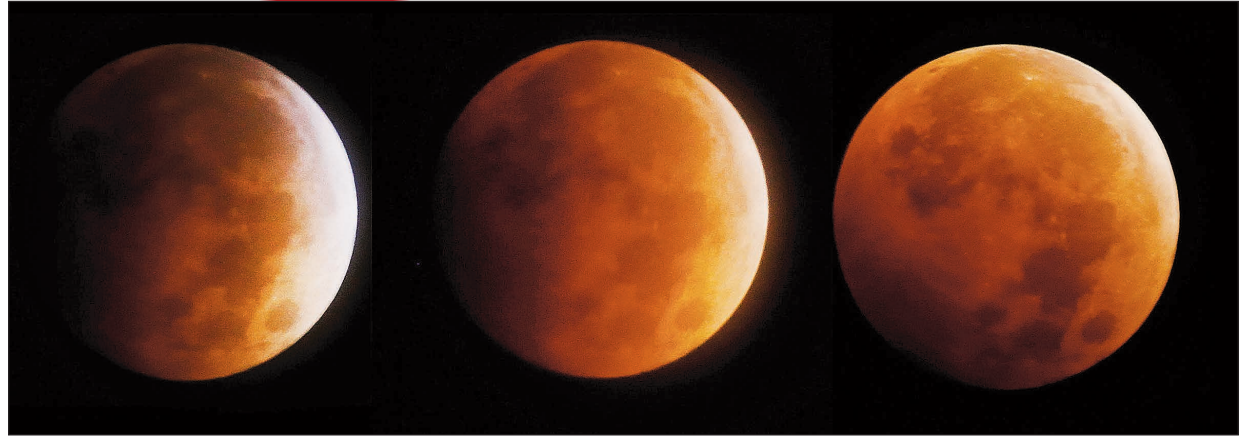
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## Instant pictures Before digital cameras

The American scientist Edwin Land made the first commercial instant camera, the Land Camera, in 1947. His company, Polaroid, made film that developed the image when you pulled it out of the camera.



## Art & design



JEFFREY D. ALLRED, DESERET NEWS



RAVELL CALL, DESERET NEWS



JEFFREY D. ALLRED, DESERET NEWS

The pictures above show the different kinds of photos photographers at the newspaper take. Photography is an important part of telling the story.

## Through the lens

### What makes a good photograph?

Learning to enjoy and understand photographs helps you learn to see more. Try looking at photos and think about which ones you like, and why.

Most good photos tell a story. Think of all the different kinds of stories there are. Some make us laugh, some are scary, some make us think. Photos tell all those kinds of stories, too.

Photographs make us wonder. Why is that boy running? What is that cat looking at? They make us think about the world around us.

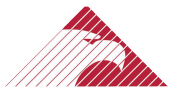
Photographs help us feel. What would it be like to be the person in that picture? Perhaps they

make you wish for something.

Photographs open a door into the wide world. A picture of penguins on an iceberg takes us to a distant part of the world. A picture of rocks on Mars takes us to another planet.

Photographs show us the world in a new way. Some of the best pictures show us things we know but haven't really looked at. Think how a picture can show us an old person's face or the way light shines through a flower. Try looking at different things as if you were seeing them for the first time. That's the way an artist, or a photographer, looks at the world.





MOUNTAIN AMERICA  
CREDIT UNION



**Develop financial awesomeness in 2018**

Money is involved in almost every awesome thing you read or see online. How much did it cost to film that sick snowboard trick, skateboard fail or other creative outlet? Whatever your interests, it usually takes money to make them come alive. Set a New Year's resolution to help you get there.

Whether it's tracking your spending, earning money or using technology to manage money, there are lots of ways to achieve your goal. Here are some steps to make your resolution happen:

- Keep resolutions simple and meaningful
- Choose a few things to focus on, change or do better
- Decide how much money you will need for each resolution
- Break each resolution into doable tasks
- Determine how often and when you will work on each resolution
- Put reminders on your phone or in a place you will see them every day
- Tell someone what your plans are so he or she can check in and hold you accountable
- Stay positive – bettering yourself is always a good thing and is something for which your future self will thank you.

A new year is coming. Make some resolutions that expand your interests, grow your strengths and build your hobbies. This endeavor will also lead you to develop greater financial awesomeness.

# The early invention of taking pictures

**T**oday with digital photography we point and shoot. A camera phone can take a picture and send it instantly by cell phone to another person anywhere in the world. But what was it like in the early days of photography?

Here is the story of one of the great inventors who helped make good pictures possible. In 1851, the Englishman Frederick Scott Archer revealed to the world his new "Collodion Photography" process. Collodion was originally used as a dressing or bandage for wounded soldiers. Archer realized that it could also be used to make a film on glass.



**Frederick Scott Archer**

If you have seen photographs taken during the Civil War, you have seen pictures made with

Archer's process. Mathew Brady is the name of the photographer who took so many of the Civil War pictures that appear in films and books today.

Here are the steps that a photographer from the Civil War had to go through to capture an image. The first thing needed was a very clean glass plate. Then the photographer or helper poured the collodion onto the plate. To make it sensitive to light, the plate was placed in a bath of silver nitrate. This step had to be done in the dark. With the plate in a light-tight holder, it was taken to the camera and inserted. Finally the picture was taken, and the plate brought back to a dark tent. The photog-

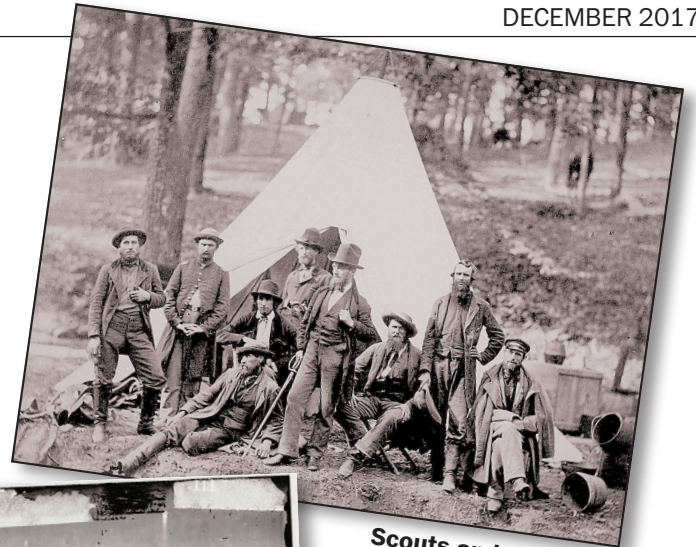


**Wagons and camera equipment of Civil War photographer Sam A. Cooley.**

rapher developed the plate in more chemicals and rinsed it in water. Once dry, a varnish was flowed over the image to protect it. It would take almost an hour to produce a single picture this way.

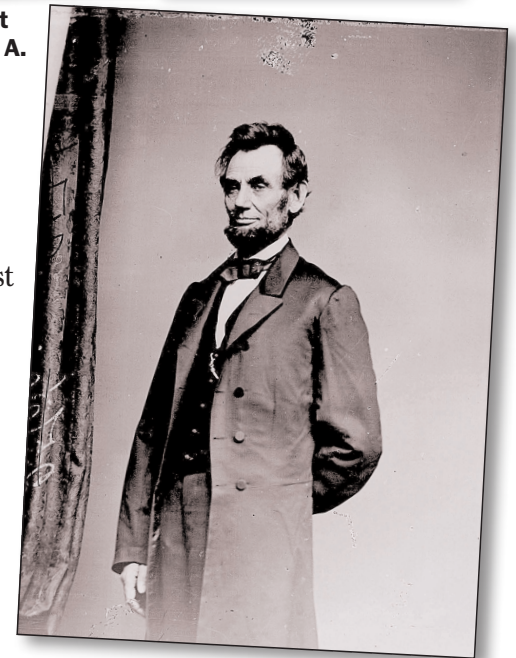
Inventors during the 1900s came up with several ways to take photographs. One was the daguerreotype, an image made on a mirror-polished surface of silver. This process was brought to the United States by Samuel F. B. Morse. He was an outstanding artist who is best remembered for Morse Code and the telegraph. The daguerreotype is named after one of its inventors, French artist and chemist Louis J. M. Daguerre.

The next time you look at a picture taken in the early years of photography, remember the amount of work that went into making the image. Remember the



**Scouts and guides for the Army of the Potomac, in Berlin, Md., October 1862. Photographed by Alexander Gardner.**

**“Photography takes an instant out of time, altering life by holding it still.”**



**Abraham Lincoln, ca. 1863. By Mathew B. Brady**

people that have come before you who developed processes such as this. It is easy to stand in awe if we take the time to think of the work and ingenuity of these visionaries.

**— Gerald Hasty**





“The Wave” from “Visual Verse,” a book of poetry and nature photography by John Parkinson.

# Picture perfect

■ **BY CARMA WADLEY**  
FOR THE DESERET NEWS

**PAYSON** — As a young boy, John Parkinson looked through the lens of his mother’s folding bellows Kodak Autographic 2C camera — and fell in love with the world he saw. By age 12, he had built his own light box and was producing black-and-white contact sheets. Photography had become a favorite hobby.

As he was growing up, his parents often took the family on treks through the Rocky Mountains and across the Colorado Plateau, often on day trips from their home in Benjamin, Utah. Parkinson again fell in love with the world he saw. He loved taking pictures of it.

So what does Parkinson look for when he goes in search of pictures? “I try to find a unique perspective. Sometimes that’s the light, sometimes the angle.”

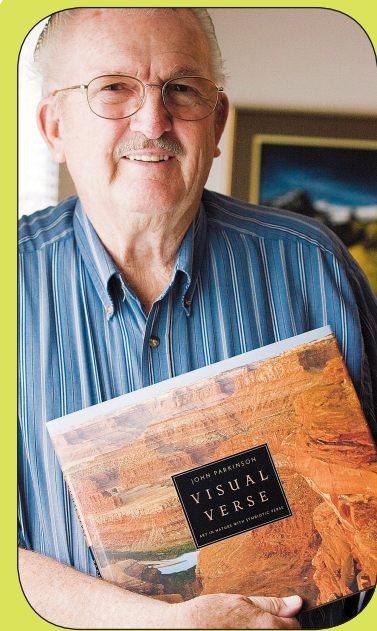
And sometimes it’s serendipity — being in the right place at the right time. “But I like what they say about success — that’s when luck makes opportunity.”

Many times, he says, he’s had a preconceived

notion of what he was looking for, only to get sidetracked by something else. For example, “one time I was going to take pictures of a grand ocean landscape, with crashing waves and sweeping vistas. My eye was caught by a little pile of pebbles. And I thought that the grand landscape was really made up of these little rocks, just like humanity is made up of an accumulation of individual people.”



“Virgin River” photograph by John Parkinson.



DESERET NEWS ARCHIVES

John Parkinson poses with his book “Visual Verse.”

Photographer offers some pointers on how best to capture the wonders of nature

*John Parkinson shares some tips on taking nature photographs:*

■ Keep in mind the time of day. Photographers look for “sweet light,” early morning or late afternoon when shadows delineate form in dramatic ways.

■ Don’t think you just need a bright, sunny day. An impending storm or the clearing right after a storm can offer spectacular lighting.

■ Take a lot of pictures. “That’s easier now with digital cameras.”

■ Get off the beaten path. Some of the best shots are away from the road — or at least out of the car.

■ Follow common sense and safety rules. Don’t risk your life for a great picture.

■ Don’t get so caught up in the pictures that you forget to enjoy the setting. Take time to look around and savor what nature has to offer.



**NEWSPAPER  
ACTIVITIES**

■ See if you can find pictures in the newspaper that tell a story. Cut out or save the photos that tell different stories. Pick out your favorite picture. Can you say what you like about it? See if you can find photos that tell these kinds of stories:

**Joy:** An athlete who has just won a game or scored a point. A person who won a prize.

**Sadness:** A wrecked car or a burned building.

**Action:** Basketball players jumping and soldiers running.

**Wonder:** What new thing did you learn from a photograph? What is the most amazing photo?

**Fun:** Can you find pictures that make you laugh?

**The future:** Look for photos that make you think about your future. A person doing something you hope to do. A new invention or machine or art. Someone you look up to. A place you'd like to be.

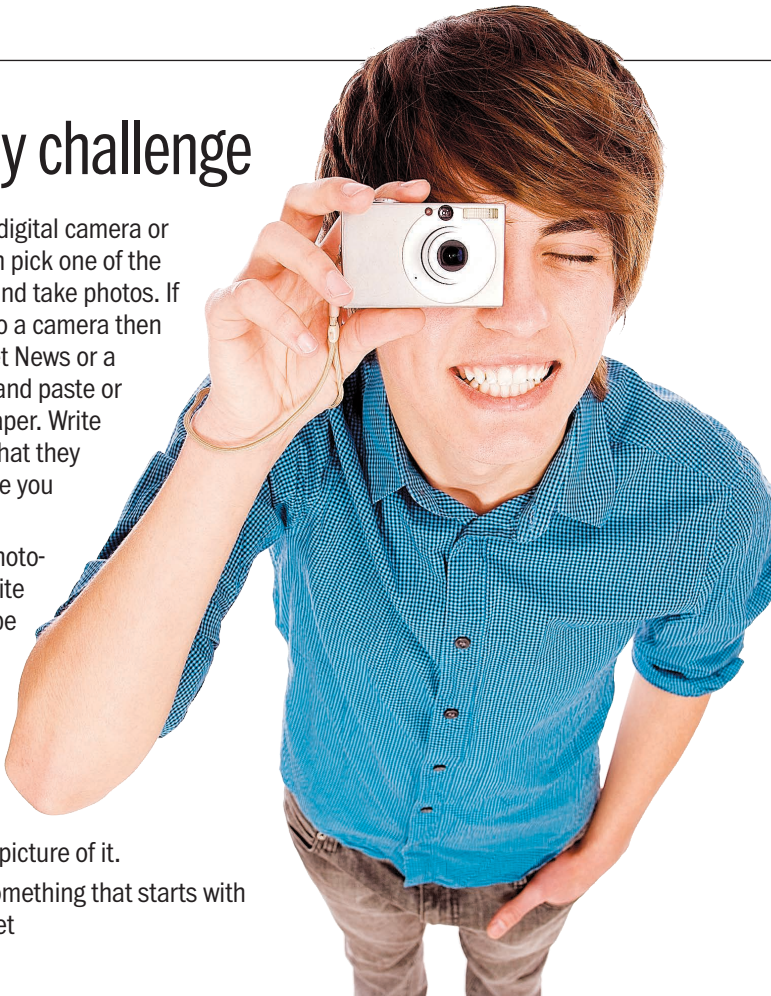
# Photography challenge

Do you have access to a digital camera or camera phone? If so then pick one of the challenges listed below and take photos. If you do not have access to a camera then find photos in the Deseret News or a magazine. Cut them out and paste or tape them to pieces of paper. Write your story below or list what they represent in the challenge you pick.

■ **Story time:** Take a photograph of anything and write a story about it. It could be of kids at recess. Name the students and create a story behind them.

■ **Scavenger hunt:** Create a list of 20 items you can find in the house or in the yard and take a picture of it.

■ **ABC's:** Photograph something that starts with each letter of the alphabet



## HOW MANY DIFFERENT WORDS CAN YOU THINK OF USING THE LETTERS IN DIGITAL PHOTOGRAPHY

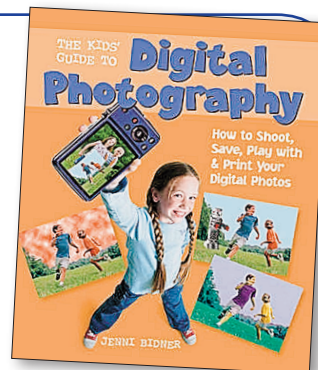
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**“The Kids’ Guide to Digital Photography: How to Shoot, Save, Play With & Print Your Digital Photos”**  
by Jenni Bidner

Digital photography is hot, and kids want to get in on the fun. This comprehensive instructional guide, created especially for youngsters, tells them exactly what they need to know to capture those birthday parties, school events, sleepovers and family vacations. Every important question gets an easy-to-understand answer: What’s a pixel? What is resolution and why does it matter? How can I make computers, scanners and printers work with my camera?

Children will get creative with software that alters and enhances images, and learn new ways to add text, adjust color and brightness and change a background. Fifteen appealing projects, from turning snapshots into puzzles to crafting unique CD covers, photo magnets and digital scrapbooks, make this a no-brainer for the budding photographer.

– AT THE LIBRARY



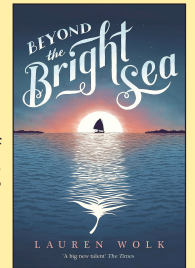
**CHECK IT OUT**



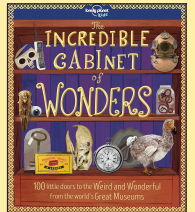
The City Library  
THE SALT LAKE CITY PUBLIC LIBRARY SYSTEM

Check out these giftable books.

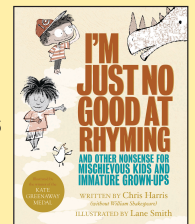
“Beyond the Bright Sea,” by Lauren Wolk. From the bestselling author of Newbery Honor-winner Wolf Hollow, the moving story of an orphan, determined to know her own history, who discovers the true meaning of family.



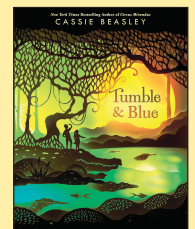
“The Incredible Cabinet of Wonders,” by Lonely Planet Kids. 12 collectors, from toy makers and monster hunters, to sailors and archaeologists, have created their own themed cabinets and filled them with their favorite things.



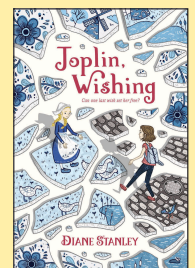
“I’m Just No Good at Rhyming: And Other Nonsense for Mischievous Kids and Immature Grown-Ups,” by Chris Harris. This groundbreaking poetry collection as “Smart and sweet, wild and wicked, brilliantly funny – it’s everything a book for kids should be.”



“Tumble and Blue,” by Cassie Beasley. From the New York Times bestselling author of Circus Mirandus comes the magic-infused story of a golden gator, two cursed kids, and how they take their destinies into their own hands.



“Joplin, Wishing,” by Diane Stanley. A heartfelt and magical novel about family, wishes, and the power of true friends to work magic.



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