

Early

Deseret News

# CONNECT 123

Read Today  
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Deseret News

Your Family • Community • World

My name: \_\_\_\_\_

## HAPPY NEW YEAR!

### FROM THE DESK OF WOODWORD

Have you made a New Year Resolution? My resolution is to become a better reader and with all the great features in this month's **Connect123**, I will get lots of practice.

Isn't it incredible that no two snowflakes are alike? William Bentley was a remarkable man and I'm going to see if I can identify different kinds of snowflakes. And there's another experiment to discover the difference between direct and indirect sunlight.

There's a story about a hippo and a tortoise becoming friends that warms your heart.

And we think Martin Luther King, Jr. Day should be a day ON and not a day OFF. You may have a day off school but this is a great day to join a volunteer group to help a local organization or get together with a neighbor who could use a hand.

Welcome to 2018. Let's resolve together to make this a great year.

Woodword



Confetti everywhere!  
Which shape appears more than the others: stars, circles or squares?



### Yaaaawn! What's different?

Look closely at these two pictures. How many differences can you find? Have a parent try. Who found more?

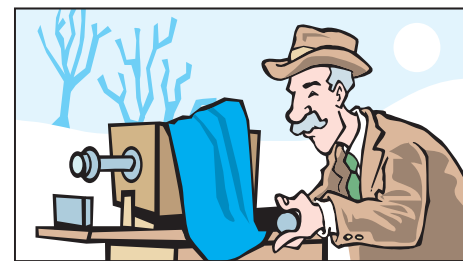


Standards link: Visual discrimination: Find similarities and differences in common objects.

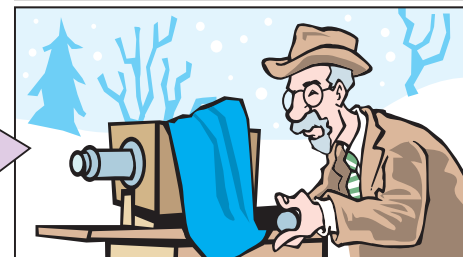


## Snowflake Man

People say no two snowflakes are alike. This fact was discovered by a man named Wilson A. Bentley. In 1885 he was the first person to photograph a single snowflake! He figured out a way to attach a microscope to a camera.

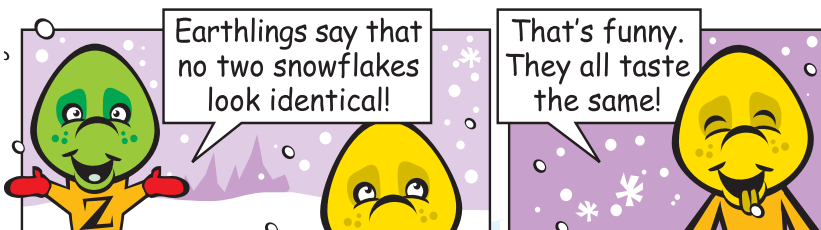


Bentley went on to photograph more than 5,000 snowflakes during his lifetime, never finding two alike.



**Look closely: Find the differences in these two pictures.**

**Standards Link:** Earth Science: Weather can be observed, written and described.



## About Snowflakes

**W**hat we usually call snowflakes are little crystals of ice called snow crystals.

Although no two snowflakes are exactly alike, their shapes do fall into several categories. Here are four kinds of snowflakes.

The water molecules in ice form a six-sided, or hexagonal, crystal. That is why most snowflakes have six sides.

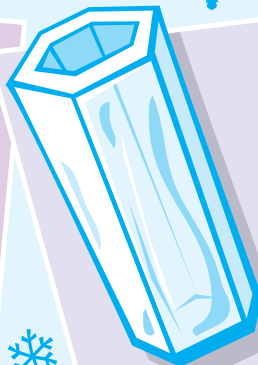
### Are snowflakes frozen raindrops?

No. Rain that freezes when it falls is called sleet. Sleet doesn't have the fancy shapes of snowflakes and it forms differently.



### Stellar dendrites

Stellar means "star-like" and dendrite means "tree-like." Put together it means these kinds of snowflakes look like stars and have branches like trees.



### Hollow columns

Most snowflakes are this kind. The columns are hexagonal, like a wooden pencil. Can you find 4 or more hollow columns?

### Sectored plates

These crystals have flat, plate-like arms or sections. Can you find at least 10 sectored plate snow crystals?

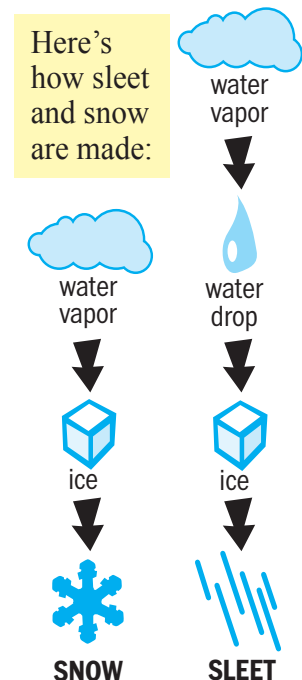


### Spatial dendrites

Not all snowflakes are thin flat plates or slender columns. Some snowflakes are made of many ice crystals jumbled together. Can you find 6 spatial dendrites?



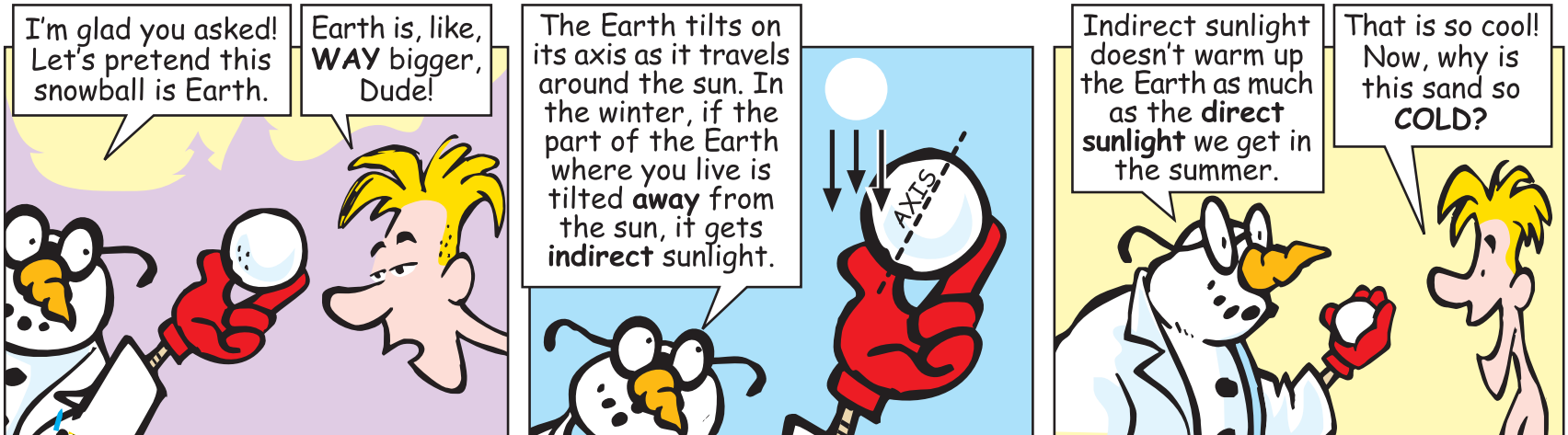
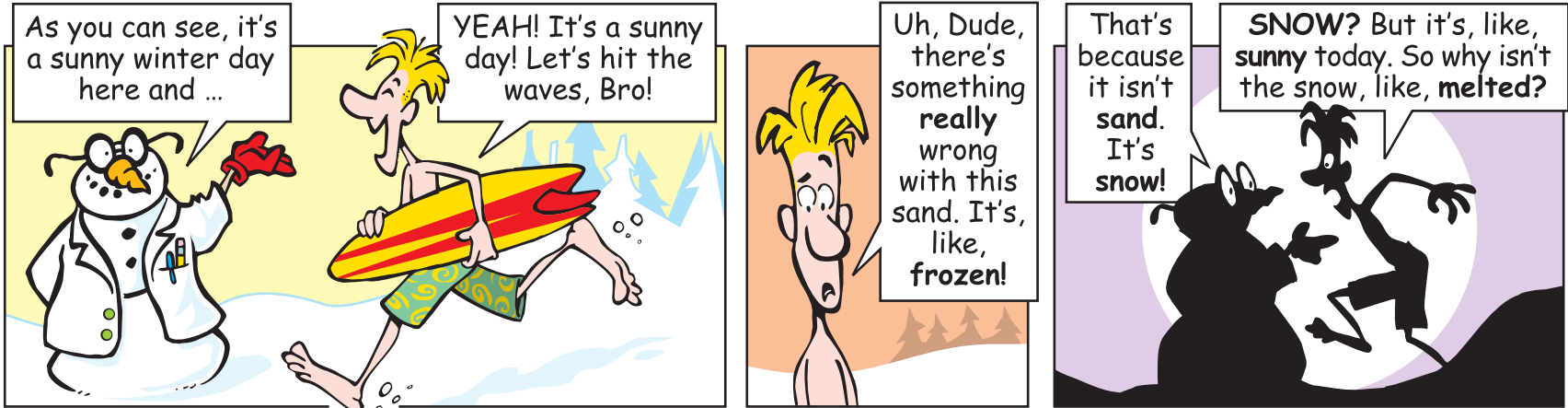
Here's how sleet and snow are made:



**Standards link:** Investigation: Recognize similarities and differences in common objects.

# Sunny question

Why are sunny winter days COLD, while sunny summer days are HOT?  
Winter expert Dr. I. Cicle explains it all!



Standards link: Earth science: Students know that weather can be observed, measured and described; changes in weather and seasons are affected by the Earth's position.

## Experiment tells all

Try this experiment to understand the difference between indirect and direct sunlight. Keep track of your work on a separate sheet of paper like the Scientist's Notebook.

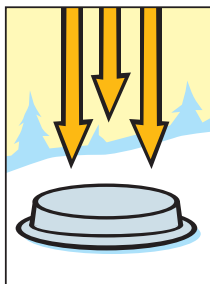
### Stuff you need:

- 2 metal pie tins or flat pans
- A sunny winter day
- Watch or clock

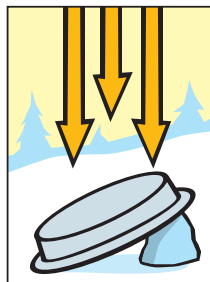


### What to do:

1. Lay one pan flat on the ground in the direct sunlight. (Fig. 1)
2. Tilt the other pan on its side. Lean it against a rock or a shoe. This pan is being hit with indirect sunlight. (Fig. 2)
3. Wait three minutes.
4. Which pan is warmer?



(Fig. 1) direct sunlight



(Fig. 2) indirect sunlight

SCIENTIST'S NOTEBOOK			
Question	Hypothesis	Observation	Conclusion
Which pan do you think will feel warmer after three minutes in the winter sun?	What do you think the answer to the question is? <input type="checkbox"/> pan in direct sunlight <input type="checkbox"/> pan in indirect sunlight	Which pan was warmer in three minutes? <input type="checkbox"/> pan in direct sunlight <input type="checkbox"/> pan in indirect sunlight	Was your hypothesis correct? What did you learn from this experiment?

**Sun spot mystery**

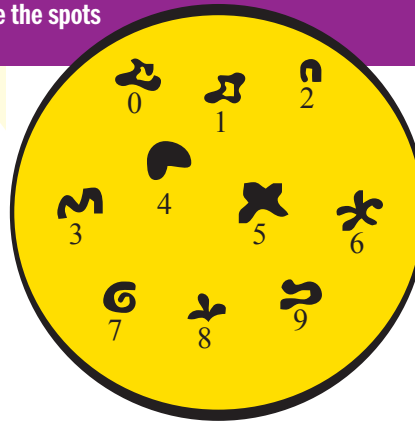
The sun is covered with spots! Use the spots to solve the mystery questions.

How far is the sun from the Earth? million miles

How long does it take the sun to make one complete rotation?  
 Earth days

What is the diameter of the sun?  
 miles.

**WARNING!**  
Never look directly at the sun as this can damage your eyesight!



**Standards link:** Earth science: Students know about the sun, planets and stars.

**Word search**

Find the words by looking up, down, backwards, forwards, sideways and diagonally.

- |            |       |          |        |           |        |           |       |
|------------|-------|----------|--------|-----------|--------|-----------|-------|
| AXIS       | MILES | SAND     | SUMMER | ALIKE     | FALL   | PENCIL    | STARS |
| EXPERIMENT | PAPER | SHOE     | WINTER | BENTLEY   | FROZEN | PLATES    | TOOL  |
| DIAMETER   | METAL | SNOWBALL |        | DENDRITES | ICE    | SNOWFLAKE | WATER |
| HYPOTHESIS | PAN   | SUNLIGHT |        | CAMERA    |        |           |       |

S I S E H T O P Y H  
D A L L A B W O N S  
I W N I R E M M U S  
A S S D N X T N E R  
M I M E T A L R S E  
E X P E R I M E N T  
T A R S G T L P U N  
E E O H S I N A S I  
R H T I M N A P N W

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

**Snowflake pattern time**

Draw the snowflake that comes next in each row.

	<input type="text"/>
	<input type="text"/>
	<input type="text"/>
	<input type="text"/>
	<input type="text"/>

**Standards link:** Math: Extend simple patterns.

**Answers**

How far is the sun from earth? 93 million miles  
How long does it take the sun to make one complete rotation? 25 Earth days  
What is the diameter of the sun? 864,000 miles

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East Midvale Elementary School managed to change their school grade from a "D" to a "B." Santa, Buddy the Elf and the Read Today team were so impressed that we decided to pay them a visit. These students worked hard, considering nearly a third of their students come from homeless shelters or hotels. The faculty of East Midvale Elementary focus on having a culture of caring and reading. Teachers are able to customize reading plans for each student while also encouraging parents to read to their kids after school. With that, they found that science and math scores also improved and the results are the best Christmas gift this community could have asked for.

Please send ideas, suggestions or information to: [nie@deseretnews.com](mailto:nie@deseretnews.com)

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55 N. 300 West

**Learning buddy sign here**

I have completed \_\_\_\_\_ activities with my Learning buddy.

Learning buddy's signature \_\_\_\_\_ Date \_\_\_\_\_

Early

Deseret News



CONNECT

123

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My name: \_\_\_\_\_

**BIOGRAPHY**

# RUBY BRIDGES



## Meet Ruby

On Nov. 14, 1960, a little girl named Ruby Bridges walked to school past a screaming mob of angry white people. She had to be protected by four gun-toting U.S. federal marshals.

Why? She was doing something no other African American in her hometown of New Orleans had ever done before. She was going to school with white children.

### COURAGE

## Not welcome

For months, Ruby quietly walked up the steps of William Frantz public school, past youths who were chanting, “Two, four, six, eight! We don’t want to integrate,” past a woman threatening to “poison” her, past signs designed to terrify her. One woman had a baby-sized coffin with a black doll inside. “That really scared me,” remembered Ruby.

Ruby’s courage amazed and inspired people. Former First Lady Eleanor Roosevelt sent Ruby a letter. Circle every other letter to discover what she told Ruby in that letter.

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

S \_\_\_\_\_

### PATIENCE

## Alone at school

For young Ruby, the isolation was even worse than the threats. When the school’s white parents pulled their children out in protest, she was left alone, day after day, with her white teacher, Barbara Henry.



Draw a couple of classmates sitting by Ruby to be her friends.

Standards Link: History: Understand the accomplishments of ordinary people in historical situations.

## Vocabulary Challenge

**SEGREGATION** means the practice of separating people into groups, especially racial groups. Before 1960, schools in America were segregated. Can you guess what **integration** means?

- a. Remembering a name
- b. Bringing people together that used to be separated
- c. Excluding people based on race
- d. Organizing names alphabetically



# Martin Luther King, Jr. Day of Service

Make your celebration of Martin Luther King, Jr. Day “a day on, not a day off.” This year, thousands of people will do just that by volunteering.

## SEEDS OF LEARNING AND SERVICE

AMHERST, MA – Every spring, kids at the Common School in Amherst, plant pumpkins and proceed to learn how to care for them. And from these seeds come study and service.

In the fall, after they harvest the pumpkins, students practice math

skills by weighing them and counting the seeds.

The learning continues as they measure ingredients to make dozens of loaves of pumpkin bread, which they donate to the nearby senior center.

Read the above article and identify each of the following:

**WHO:**

**WHAT:**

**WHEN:**

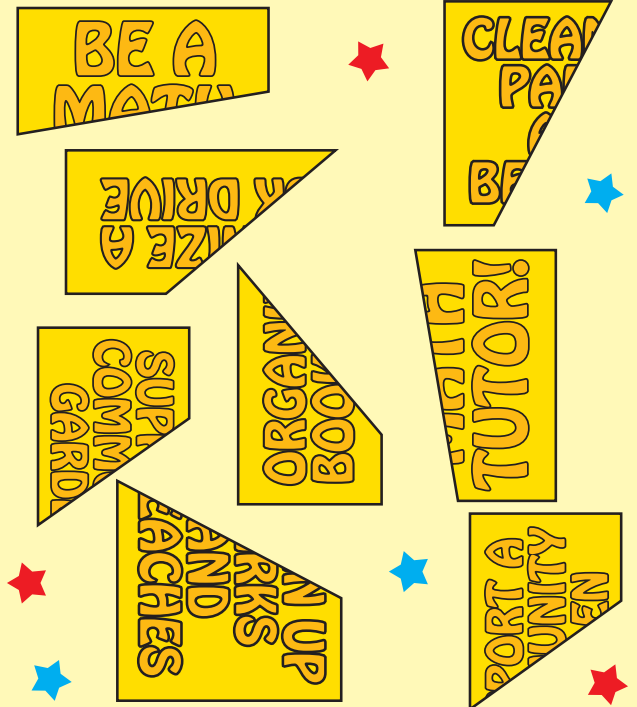
**WHERE:**

**Standards link:** Civics: Students understand the importance of volunteering as a characteristic of American society (e.g., people should volunteer to help others in their family, schools and communities).

## Service ideas

The kids in Mrs. Kelsey’s class painted some posters to give kids ideas about the kinds of things they can do to help in their neighborhood. But they fell off the line while drying and got mixed up.

Can you match the two halves of each poster?



**Standards link:** Language arts: Use reading skills and strategies to understand a variety of texts.

Take a look at this list of MLK, Jr. Day of Service ideas. Then look at each picture. Number the project you think each kid chose in the circles.

1. Clearing an elderly neighbor’s sidewalk.
2. Collecting canned goods for a food bank.
3. Help coach a younger child’s team.
4. Help a neighbor with some yard work.
5. Play a game at the senior center.



# What to do?

Each of these kids need some advice from you. Read each story and write down your advice. Talk about your advice with a parent. Do they agree with you?

## Sticky problem



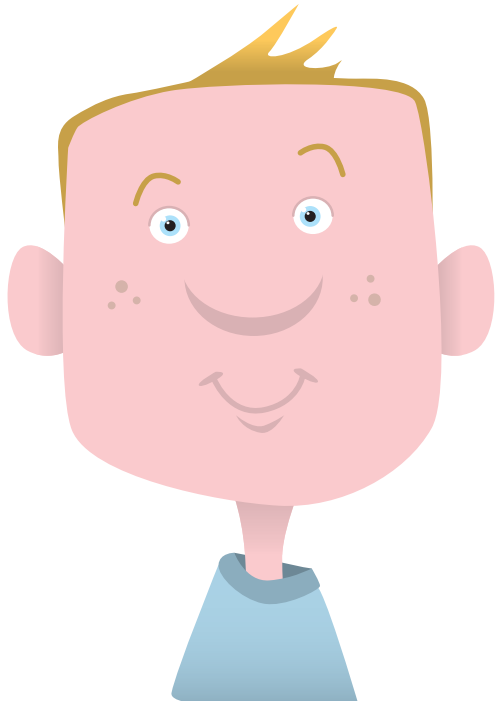
Evan collects stickers from the grocery store vending machine. Each one costs 50¢. He buys one each time his family shops, which is usually three times a week.

Evan earns \$3 a week pulling weeds in his neighbor's yard, so he spends half of his money each week on stickers and saves the rest in his piggy bank.

This week, the grocery store replaced the old sticker machine with a brand new one. The stickers are bigger, but they cost \$1 each. If he buys three, he'll spend all his money every week.

**Q: What should Evan do to keep saving some money each week?**

**A:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Savings shortage



David is trying to save money to buy a new LEGO set that costs \$29. He gets an allowance of \$5 every Friday afternoon from his mom.

David tries to save at least \$3 every week. He spends about \$2 when he visits the video arcade on Sunday afternoons. But sometimes he'll spend more than he planned to trying to top his best score.

Last Sunday, he spent \$8.50, which ate into his LEGO savings. Now he only has about \$4 saved up for the LEGO set.

**Q: What can David do to save the \$29.00 faster?**

**A:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Bike lane pain

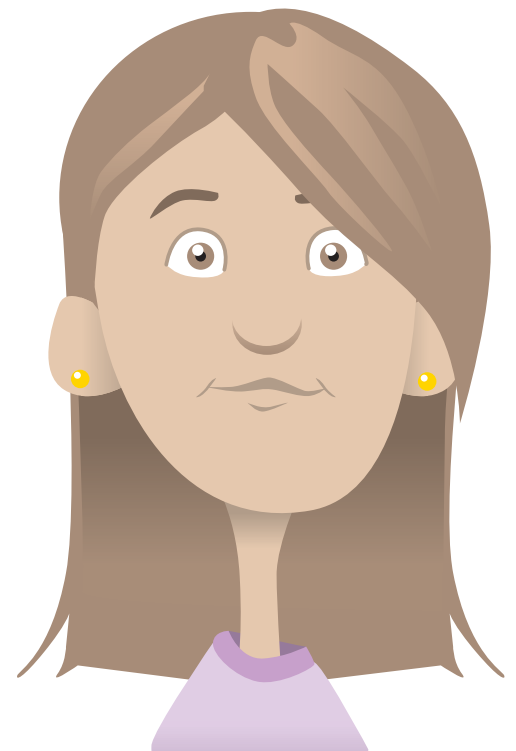


Maria walks and feeds her Aunt Meridith's dog, Zinger, every day after school. Maria gets \$2 per day for taking such good care of Zinger.

Maria wants a new bike that costs \$75. If she saved all her money each week, she could buy the bike in about two months. But Maria downloads music from her favorite bands at \$1.30 per song a couple of times a week. She also buys a smoothie for \$3.95 on Saturdays with her friend Katie. Sometimes they go to a movie, which costs \$7 per ticket.

**Q: What advice would you give Maria about how to reach her goal of buying that new bike?**

**A:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# Trash-bag team

The volunteer coordinator asked four students to collect as many bags of garbage as they could find in the park. How many did each student find? Use the clues to complete the chart.

- The 4 students filled a total of 15 bags.
- No one filled more than 7 bags.
- None of the students filled the same number of bags.
- Cassidy filled 5 bags.
- Owen filled 3 less than Cassidy.
- Sam filled the most bags.

**Standards link:**  
Mathematical reasoning: Use a variety of strategies to solve problems.

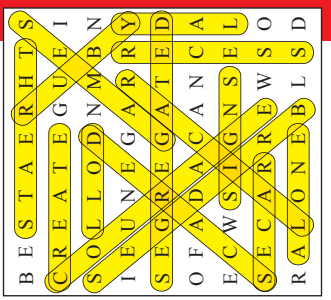


Students	Bags
CASSIDY	
OWEN	
BODIE	
SAM	
TOTAL	15

## Answers

**Trash-bag Team:** Cassidy filled 5 bags, Owen filled 2 bags, Bodie filled 1 bag and Sam filled 7 bags.

**Puzzler:** Read to a younger child.



# Puzzler



R \_ \_ \_ \_

**Standards link:** Reading comprehension: Follow simple written directions.

# Word search

Find the words by looking up, down, backwards, forwards, sideways and diagonally.

- ALONE GAMES RUBY
- BRIDGES LADY SCARED
- COURAGE RACES SEGREGATED
- CREATE RACIAL SIGNS
- DOLL RECESS THREATS

B E S T A E R H T S  
C R E A T E G U E I  
S O L L O D N M B N  
I E U N E G A R R Y  
S E G R E G A T E D  
O F A D A C A N C A  
E C W S I G N S E L  
S E C A R R E W S O  
R A L O N E B L S D

**Standards Link:** Letter sequencing. Recognized identical words. Skim and scan reading. Recall spelling patterns.

# CHECK IT OUT



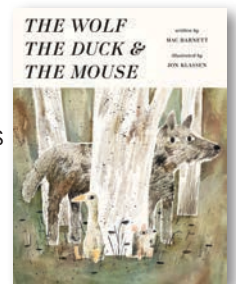
The City Library  
THE SALT LAKE CITY PUBLIC LIBRARY SYSTEM

This November the librarians at the Salt Lake Public Library believe these books to be award worthy. What do you think? Check out their picks and start reading!

**"After the Fall,"** by Dan Santat. Everyone knows that when Humpty Dumpty sat on a wall, Humpty Dumpty had a great fall. But what happened after?



**"The Wolf, the Duck and the Mouse,"** by Mac Barnett. This is a story about a duck and mouse who get swallowed by a wolf, and then decide to live in his belly.



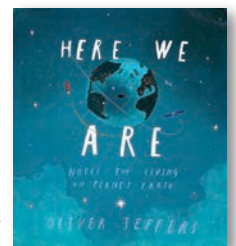
**"Flashlight Night,"** by Matt Forrest Esenwine. Three children use a flashlight to light a path around their backyard at night; in the flashlight's beam another world looms.



**"This Is How We Do It,"** by Matt Lamothe. Follow one day in the real lives of seven kids from around the world – Italy, Japan, Iran, India, Peru, Uganda, and Russia!



**"Here We Are: Notes For Living On Planet Earth,"** by Oliver Jeffers. Jeffers offers a rare personal look inside his own hopes and wishes for his child



## Learning buddy sign here

I have completed \_\_\_\_\_ activities with my Learning Buddy.

Learning buddy's signature \_\_\_\_\_ Date \_\_\_\_\_

Please send ideas, suggestions or information to: [nie@deseretnews.com](mailto:nie@deseretnews.com)

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My name: \_\_\_\_\_

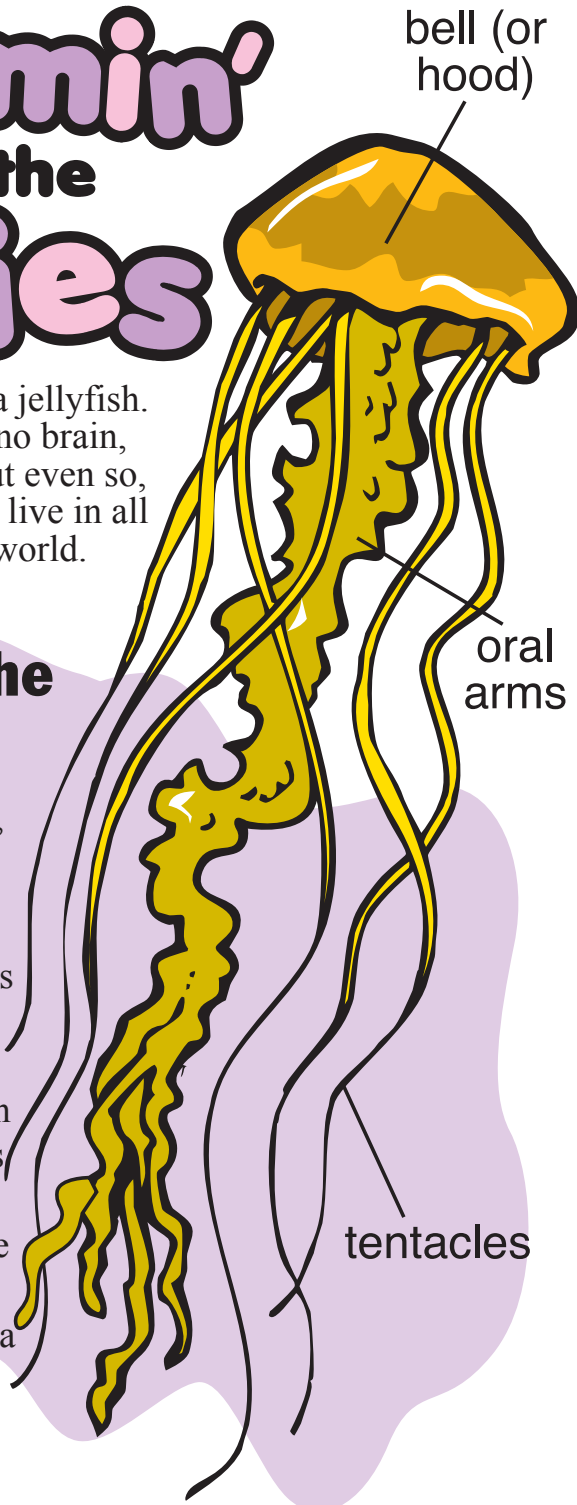
ANIMAL

# Jammin' with the Jellies

There isn't much to a jellyfish. It's not a fish; it has no brain, no heart, no eyes. But even so, jellies eat, travel and live in all of the oceans of the world.

## Cruisin' the food web

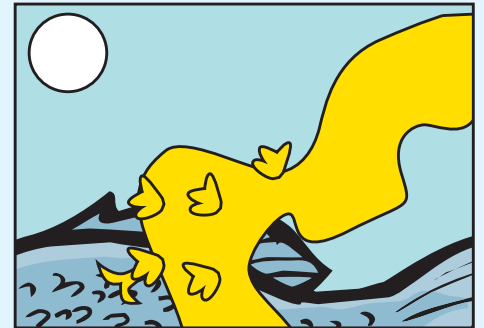
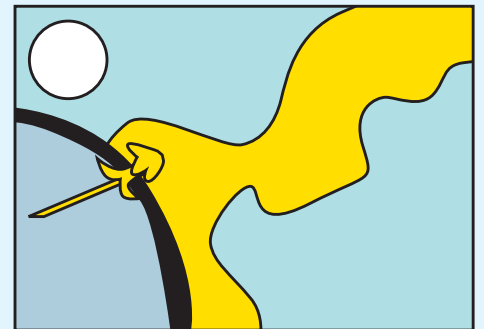
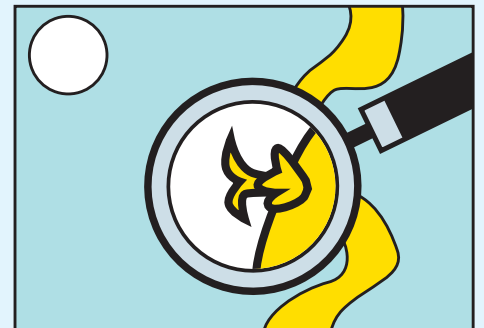
Jellies survive by riding the oceans' currents. Plankton, the minute plants and animals that jellies dine upon, are also drifters, floating in the same currents the jellies travel. By going with the flow, jellies end up floating in a sea of food.



## How a Jellyfish stings

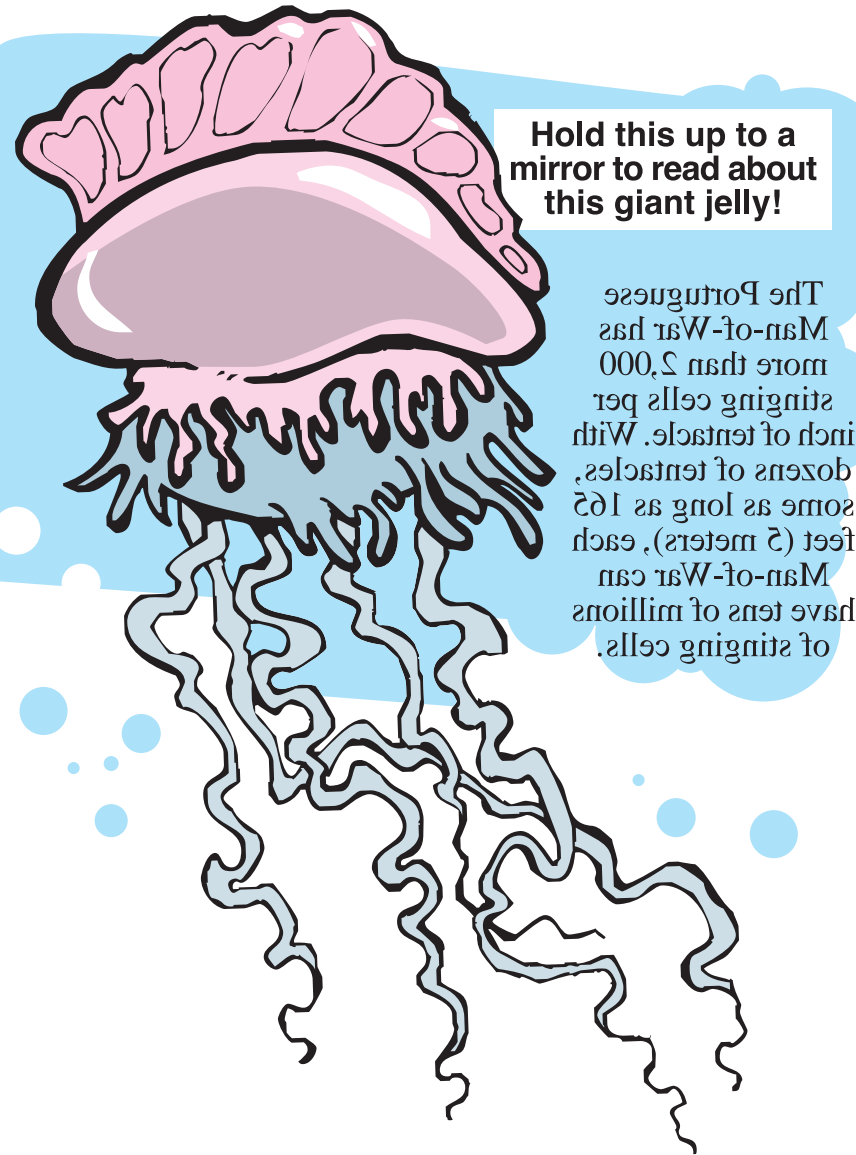
Read how a jellyfish stings. Number the pictures from 1 to 4 to show the stinging steps.

1. A tentacle contains many stinging cells.
2. A fish brushes against a tentacle. The stinging cell on the jellyfish's tentacle bursts open and launches the stinger into the fish's skin.
3. A barb on the stinger holds it in place.
4. The stinger shoots a long tube into the wound and injects a poison through it.



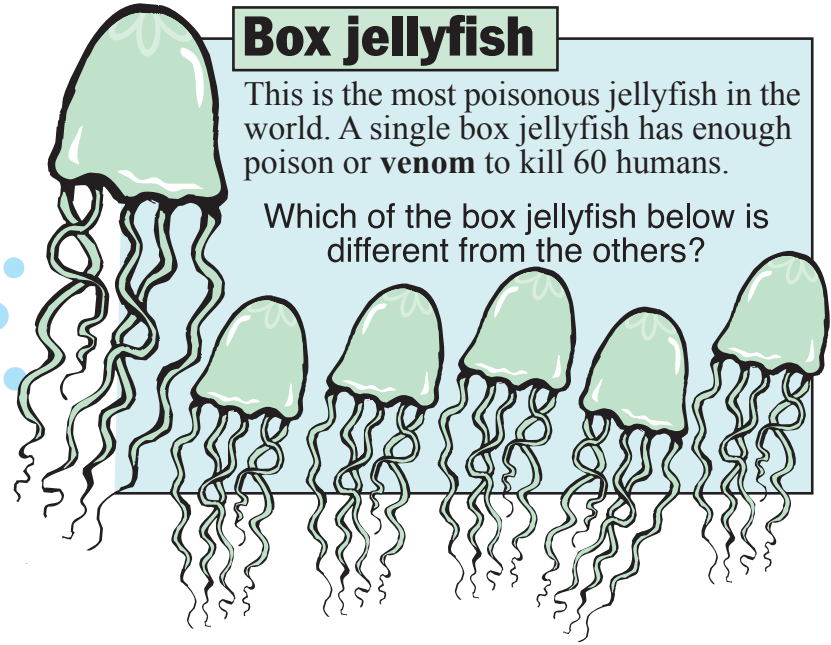
**Ancient Animals:** Older than sharks and dinosaurs, jellyfish have lived on earth for over 650 million years.

**Standards link:** Life science: Living organisms have distinct structures that serve specific functions in survival.



Hold this up to a mirror to read about this giant jelly!

The Portuguese Man-of-War has more than 2,000 stinging cells per inch of tentacle. With dozens of tentacles, some as long as 150 feet (50 meters), each Man-of-War can have tens of millions of stinging cells.



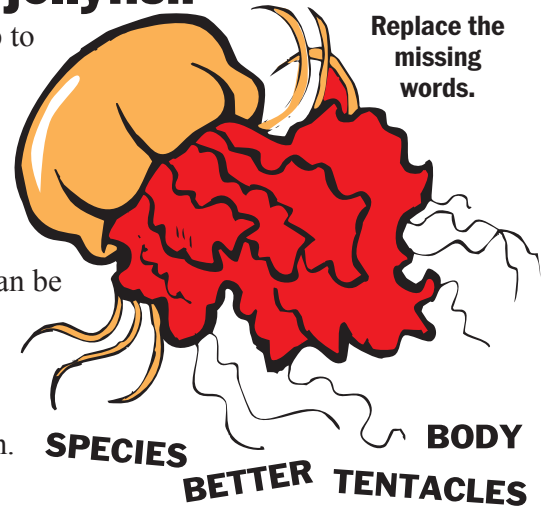
**Box jellyfish**

This is the most poisonous jellyfish in the world. A single box jellyfish has enough poison or **venom** to kill 60 humans.

Which of the box jellyfish below is different from the others?

**Lion's Mane jellyfish**

With \_\_\_\_\_ up to three meters long and covered with stinging cells, it's \_\_\_\_\_ not to get too close to the Lion's Mane jellyfish. Its \_\_\_\_\_ can be up to 80 inches across (200 cm), making it one of the largest \_\_\_\_\_ of jellyfish.

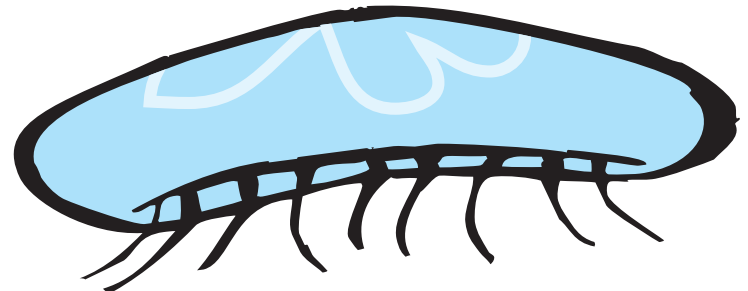


Replace the missing words.

**SPECIES** **BODY**  
**BETTER** **TENTACLES**

**Moon jellyfish**

Its saucer top grows to 16" wide and has many short tentacles. This is the jelly that most commonly washes up on beaches.

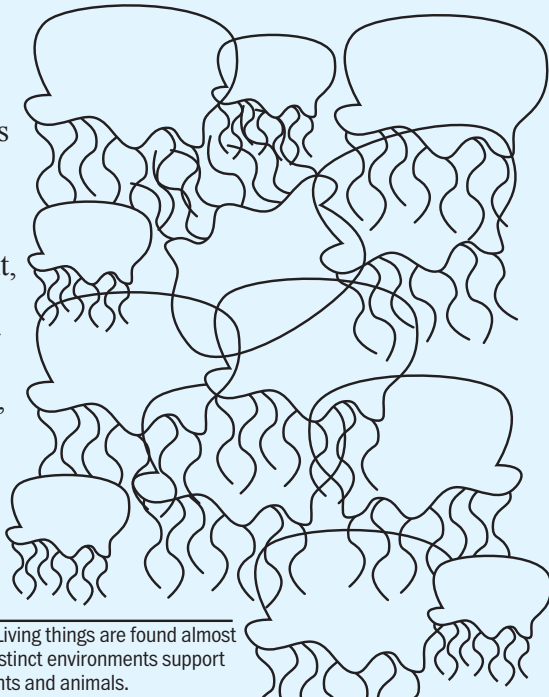


Standards link: Life science: Understand diversity within species.

**Puzzler**

To be carried by the currents, drifters have to travel light. The blob-like bodies of the jellies are nearly weightless in the water. Their "jelly" is transparent, so the animals can almost disappear — a useful trick in the middle of the ocean, where there is no place to hide.

How many jellyfish do you see here?



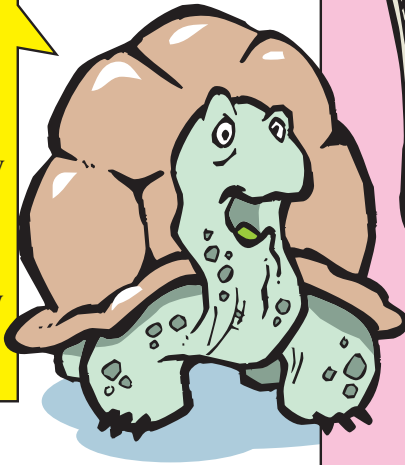
Standards link: Life science: Living things are found almost everywhere in the world and distinct environments support the life of different types of plants and animals.

**Answers**

Lion's Mane jellyfish With TENTACLES up to three meters long and covered with stinging cells, it's BETTER not to get too close to the Lion's Mane jellyfish. Its BODY can be up to 80 inches across (200 cm), making it one of the largest SPECIES of jellyfish.  
How many jellyfish do you see? 13

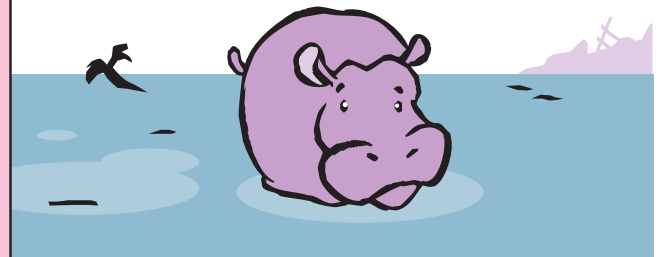
# Owen and Mzee: A most unusual friendship (A true story!)

Hi there! My name is Mzee. I'm about 130 years old (I don't bother to keep track of my birthdays anymore). Here's the story of how I met my best friend named Owen.



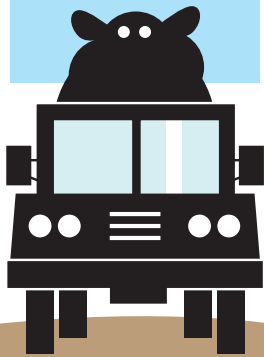
In Kenya, a baby hippo was left stranded on a coral reef. He was too tired and frightened to get back to shore by himself. Hundreds of villagers and visitors worked together to rescue the young hippo.

Back in 2004, there was a terrible tsunami that caused unbelievable damage and loss of life in Southeast Asia and Africa. You or your parents probably read about it.



A man named Owen Sobien was able to tackle the slippery hippo long enough for others to drape a net over him. The hippo was named Owen in his honor.

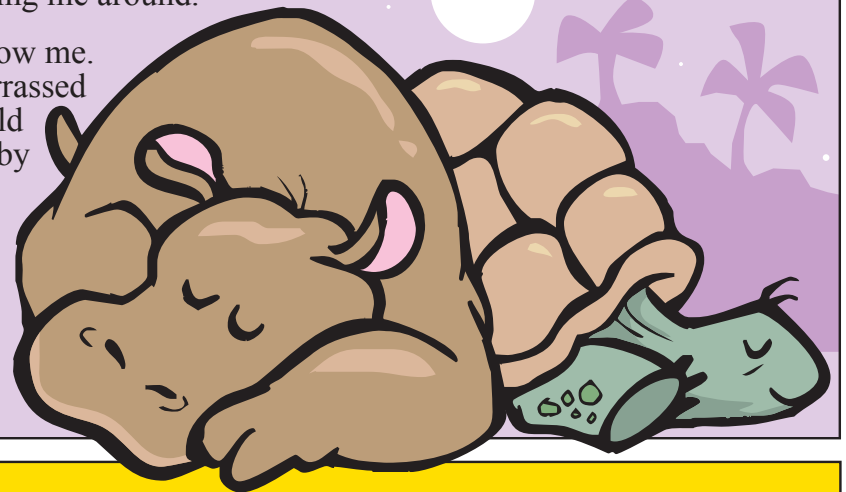
Owen was moved to Haller Park, Kenya, where I live.



Now, I've always preferred to be by myself. But Owen just kept following me around.

If I walked away, he'd follow me. At first, I felt a little embarrassed and annoyed when he would crouch beside me like a baby hippo does with its mom.

But Owen was a nice enough kid. And without a mother, he needed someone to show him how to find food, so I did.

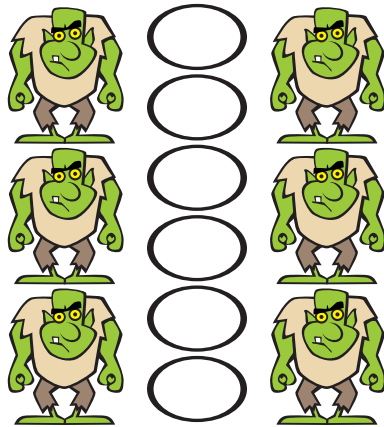
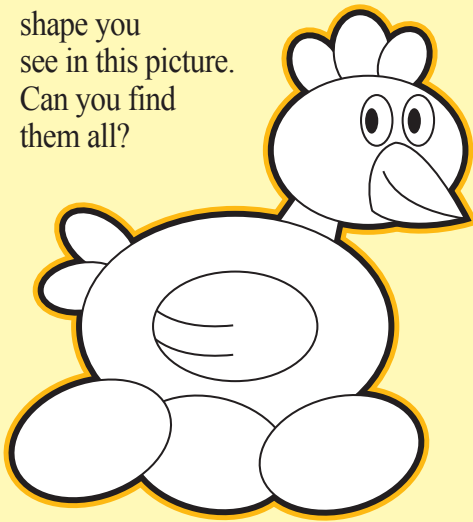


People wonder why we became such close friends. Some think it's maybe because my round shell looked a little like another hippo to Owen. What do YOU think?



**Oval art**

Trace each oval shape you see in this picture. Can you find them all?



**My rhyme time**

Old King Cole  
Was a merry old soul,  
And a merry old soul was he;  
He called for his pipe,  
And he called for his bowl,  
And he called for his fiddlers three.

**My letters**

O is for Oval  
o is for oval

How many words or pictures can you find on this page that have the sound that the letter O makes in the word oval?

**Learning buddies:** Read the two phrases aloud. Have your child read with you. Trace the uppercase and lowercase letter N. Say the letter as you trace it.

**My numbers**

How many



ogres



ovals

**Learning buddies:** Trace and say the number. Read the questions. Touch and count to find the answers.



**Hippo or tortoise?**

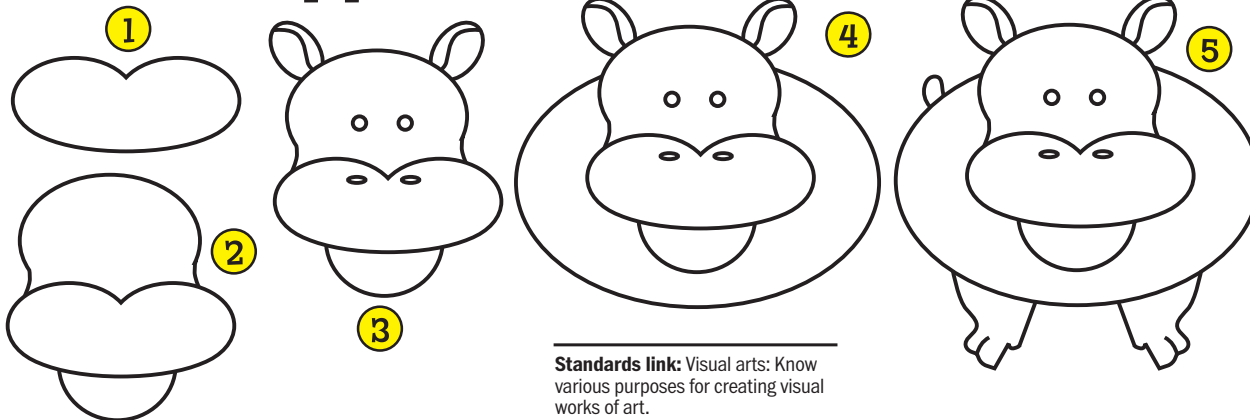
Do the math to find out which facts describe a hippo and which describe a tortoise. If the answer is less than 10, it describes a hippo. If the answer is more than 15, it describes a tortoise. If the answer is between 10 and 15, it is true for both hippos and tortoises.

- Lives to be 200 years old.  $9 + 7 =$  \_\_\_\_\_
- Lived with the dinosaurs.  $19 - 4 =$  \_\_\_\_\_
- Is an herbivore.  $6 + 5 =$  \_\_\_\_\_
- Likes to swim.  $7 + 5 =$  \_\_\_\_\_
- Its closest living relative is a whale.  $3 + 6 =$  \_\_\_\_\_
- Can run faster than a human.  $4 + 3 =$  \_\_\_\_\_



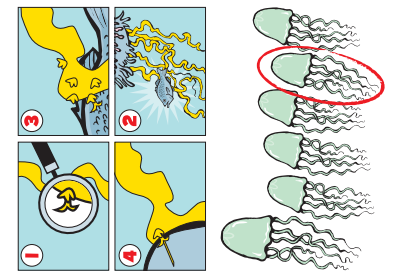
**Standards link:** Number Sense: Add and subtract whole numbers.

**Draw a hippo!**



**Standards link:** Visual arts: Know various purposes for creating visual works of art.

**Answers**



11 = 5 + 6 (hippo); 15 = 7 + 8 (tortoise); 16 = 7 + 9 (hippo); 19 = 10 + 9 (tortoise); 21 = 12 + 9 (hippo); 25 = 16 + 9 (tortoise); 30 = 20 + 10 (hippo); 35 = 25 + 10 (tortoise); 40 = 30 + 10 (hippo); 45 = 35 + 10 (tortoise); 50 = 40 + 10 (hippo); 55 = 45 + 10 (tortoise); 60 = 50 + 10 (hippo); 65 = 55 + 10 (tortoise); 70 = 60 + 10 (hippo); 75 = 65 + 10 (tortoise); 80 = 70 + 10 (hippo); 85 = 75 + 10 (tortoise); 90 = 80 + 10 (hippo); 95 = 85 + 10 (tortoise); 100 = 90 + 10 (hippo); 105 = 95 + 10 (tortoise); 110 = 100 + 10 (hippo); 115 = 105 + 10 (tortoise); 120 = 110 + 10 (hippo); 125 = 115 + 10 (tortoise); 130 = 120 + 10 (hippo); 135 = 125 + 10 (tortoise); 140 = 130 + 10 (hippo); 145 = 135 + 10 (tortoise); 150 = 140 + 10 (hippo); 155 = 145 + 10 (tortoise); 160 = 150 + 10 (hippo); 165 = 155 + 10 (tortoise); 170 = 160 + 10 (hippo); 175 = 165 + 10 (tortoise); 180 = 170 + 10 (hippo); 185 = 175 + 10 (tortoise); 190 = 180 + 10 (hippo); 195 = 185 + 10 (tortoise); 200 = 190 + 10 (hippo); 205 = 195 + 10 (tortoise); 210 = 200 + 10 (hippo); 215 = 205 + 10 (tortoise); 220 = 210 + 10 (hippo); 225 = 215 + 10 (tortoise); 230 = 220 + 10 (hippo); 235 = 225 + 10 (tortoise); 240 = 230 + 10 (hippo); 245 = 235 + 10 (tortoise); 250 = 240 + 10 (hippo); 255 = 245 + 10 (tortoise); 260 = 250 + 10 (hippo); 265 = 255 + 10 (tortoise); 270 = 260 + 10 (hippo); 275 = 265 + 10 (tortoise); 280 = 270 + 10 (hippo); 285 = 275 + 10 (tortoise); 290 = 280 + 10 (hippo); 295 = 285 + 10 (tortoise); 300 = 290 + 10 (hippo); 305 = 295 + 10 (tortoise); 310 = 300 + 10 (hippo); 315 = 305 + 10 (tortoise); 320 = 310 + 10 (hippo); 325 = 315 + 10 (tortoise); 330 = 320 + 10 (hippo); 335 = 325 + 10 (tortoise); 340 = 330 + 10 (hippo); 345 = 335 + 10 (tortoise); 350 = 340 + 10 (hippo); 355 = 345 + 10 (tortoise); 360 = 350 + 10 (hippo); 365 = 355 + 10 (tortoise); 370 = 360 + 10 (hippo); 375 = 365 + 10 (tortoise); 380 = 370 + 10 (hippo); 385 = 375 + 10 (tortoise); 390 = 380 + 10 (hippo); 395 = 385 + 10 (tortoise); 400 = 390 + 10 (hippo); 405 = 395 + 10 (tortoise); 410 = 400 + 10 (hippo); 415 = 405 + 10 (tortoise); 420 = 410 + 10 (hippo); 425 = 415 + 10 (tortoise); 430 = 420 + 10 (hippo); 435 = 425 + 10 (tortoise); 440 = 430 + 10 (hippo); 445 = 435 + 10 (tortoise); 450 = 440 + 10 (hippo); 455 = 445 + 10 (tortoise); 460 = 450 + 10 (hippo); 465 = 455 + 10 (tortoise); 470 = 460 + 10 (hippo); 475 = 465 + 10 (tortoise); 480 = 470 + 10 (hippo); 485 = 475 + 10 (tortoise); 490 = 480 + 10 (hippo); 495 = 485 + 10 (tortoise); 500 = 490 + 10 (hippo); 505 = 495 + 10 (tortoise); 510 = 500 + 10 (hippo); 515 = 505 + 10 (tortoise); 520 = 510 + 10 (hippo); 525 = 515 + 10 (tortoise); 530 = 520 + 10 (hippo); 535 = 525 + 10 (tortoise); 540 = 530 + 10 (hippo); 545 = 535 + 10 (tortoise); 550 = 540 + 10 (hippo); 555 = 545 + 10 (tortoise); 560 = 550 + 10 (hippo); 565 = 555 + 10 (tortoise); 570 = 560 + 10 (hippo); 575 = 565 + 10 (tortoise); 580 = 570 + 10 (hippo); 585 = 575 + 10 (tortoise); 590 = 580 + 10 (hippo); 595 = 585 + 10 (tortoise); 600 = 590 + 10 (hippo); 605 = 595 + 10 (tortoise); 610 = 600 + 10 (hippo); 615 = 605 + 10 (tortoise); 620 = 610 + 10 (hippo); 625 = 615 + 10 (tortoise); 630 = 620 + 10 (hippo); 635 = 625 + 10 (tortoise); 640 = 630 + 10 (hippo); 645 = 635 + 10 (tortoise); 650 = 640 + 10 (hippo); 655 = 645 + 10 (tortoise); 660 = 650 + 10 (hippo); 665 = 655 + 10 (tortoise); 670 = 660 + 10 (hippo); 675 = 665 + 10 (tortoise); 680 = 670 + 10 (hippo); 685 = 675 + 10 (tortoise); 690 = 680 + 10 (hippo); 695 = 685 + 10 (tortoise); 700 = 690 + 10 (hippo); 705 = 695 + 10 (tortoise); 710 = 700 + 10 (hippo); 715 = 705 + 10 (tortoise); 720 = 710 + 10 (hippo); 725 = 715 + 10 (tortoise); 730 = 720 + 10 (hippo); 735 = 725 + 10 (tortoise); 740 = 730 + 10 (hippo); 745 = 735 + 10 (tortoise); 750 = 740 + 10 (hippo); 755 = 745 + 10 (tortoise); 760 = 750 + 10 (hippo); 765 = 755 + 10 (tortoise); 770 = 760 + 10 (hippo); 775 = 765 + 10 (tortoise); 780 = 770 + 10 (hippo); 785 = 775 + 10 (tortoise); 790 = 780 + 10 (hippo); 795 = 785 + 10 (tortoise); 800 = 790 + 10 (hippo); 805 = 795 + 10 (tortoise); 810 = 800 + 10 (hippo); 815 = 805 + 10 (tortoise); 820 = 810 + 10 (hippo); 825 = 815 + 10 (tortoise); 830 = 820 + 10 (hippo); 835 = 825 + 10 (tortoise); 840 = 830 + 10 (hippo); 845 = 835 + 10 (tortoise); 850 = 840 + 10 (hippo); 855 = 845 + 10 (tortoise); 860 = 850 + 10 (hippo); 865 = 855 + 10 (tortoise); 870 = 860 + 10 (hippo); 875 = 865 + 10 (tortoise); 880 = 870 + 10 (hippo); 885 = 875 + 10 (tortoise); 890 = 880 + 10 (hippo); 895 = 885 + 10 (tortoise); 900 = 890 + 10 (hippo); 905 = 895 + 10 (tortoise); 910 = 900 + 10 (hippo); 915 = 905 + 10 (tortoise); 920 = 910 + 10 (hippo); 925 = 915 + 10 (tortoise); 930 = 920 + 10 (hippo); 935 = 925 + 10 (tortoise); 940 = 930 + 10 (hippo); 945 = 935 + 10 (tortoise); 950 = 940 + 10 (hippo); 955 = 945 + 10 (tortoise); 960 = 950 + 10 (hippo); 965 = 955 + 10 (tortoise); 970 = 960 + 10 (hippo); 975 = 965 + 10 (tortoise); 980 = 970 + 10 (hippo); 985 = 975 + 10 (tortoise); 990 = 980 + 10 (hippo); 995 = 985 + 10 (tortoise); 1000 = 990 + 10 (hippo); 1005 = 995 + 10 (tortoise); 1010 = 1000 + 10 (hippo); 1015 = 1005 + 10 (tortoise); 1020 = 1010 + 10 (hippo); 1025 = 1015 + 10 (tortoise); 1030 = 1020 + 10 (hippo); 1035 = 1025 + 10 (tortoise); 1040 = 1030 + 10 (hippo); 1045 = 1035 + 10 (tortoise); 1050 = 1040 + 10 (hippo); 1055 = 1045 + 10 (tortoise); 1060 = 1050 + 10 (hippo); 1065 = 1055 + 10 (tortoise); 1070 = 1060 + 10 (hippo); 1075 = 1065 + 10 (tortoise); 1080 = 1070 + 10 (hippo); 1085 = 1075 + 10 (tortoise); 1090 = 1080 + 10 (hippo); 1095 = 1085 + 10 (tortoise); 1100 = 1090 + 10 (hippo); 1105 = 1095 + 10 (tortoise); 1110 = 1100 + 10 (hippo); 1115 = 1105 + 10 (tortoise); 1120 = 1110 + 10 (hippo); 1125 = 1115 + 10 (tortoise); 1130 = 1120 + 10 (hippo); 1135 = 1125 + 10 (tortoise); 1140 = 1130 + 10 (hippo); 1145 = 1135 + 10 (tortoise); 1150 = 1140 + 10 (hippo); 1155 = 1145 + 10 (tortoise); 1160 = 1150 + 10 (hippo); 1165 = 1155 + 10 (tortoise); 1170 = 1160 + 10 (hippo); 1175 = 1165 + 10 (tortoise); 1180 = 1170 + 10 (hippo); 1185 = 1175 + 10 (tortoise); 1190 = 1180 + 10 (hippo); 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1935 = 1925 + 10 (tortoise); 1940 = 1930 + 10 (hippo); 1945 = 1935 + 10 (tortoise); 1950 = 1940 + 10 (hippo); 1955 = 1945 + 10 (tortoise); 1960 = 1950 + 10 (hippo); 1965 = 1955 + 10 (tortoise); 1970 = 1960 + 10 (hippo); 1975 = 1965 + 10 (tortoise); 1980 = 1970 + 10 (hippo); 1985 = 1975 + 10 (tortoise); 1990 = 1980 + 10 (hippo); 1995 = 1985 + 10 (tortoise); 2000 = 1990 + 10 (hippo); 2005 = 1995 + 10 (tortoise); 2010 = 2000 + 10 (hippo); 2015 = 2005 + 10 (tortoise); 2020 = 2010 + 10 (hippo); 2025 = 2015 + 10 (tortoise); 2030 = 2020 + 10 (hippo); 2035 = 2025 + 10 (tortoise); 2040 = 2030 + 10 (hippo); 2045 = 2035 + 10 (tortoise); 2050 = 2040 + 10 (hippo); 2055 = 2045 + 10 (tortoise); 2060 = 2050 + 10 (hippo); 2065 = 2055 + 10 (tortoise); 2070 = 2060 + 10 (hippo); 2075 = 2065 + 10 (tortoise); 2080 = 2070 + 10 (hippo); 2085 = 2075 + 10 (tortoise); 2090 = 2080 + 10 (hippo); 2095 = 2085 + 10 (tortoise); 2100 = 2090 + 10 (hippo); 2105 = 2095 + 10 (tortoise); 2110 = 2100 + 10 (hippo); 2115 = 2105 + 10 (tortoise); 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2305 = 2295 + 10 (tortoise); 2310 = 2300 + 10 (hippo); 2315 = 2305 + 10 (tortoise); 2320 = 2310 + 10 (hippo); 2325 = 2315 + 10 (tortoise); 2330 = 2320 + 10 (hippo); 2335 = 2325 + 10 (tortoise); 2340 = 2330 + 10 (hippo); 2345 = 2335 + 10 (tortoise); 2350 = 2340 + 10 (hippo); 2355 = 2345 + 10 (tortoise); 2360 = 2350 + 10 (hippo); 2365 = 2355 + 10 (tortoise); 2370 = 2360 + 10 (hippo); 2375 = 2365 + 10 (tortoise); 2380 = 2370 + 10 (hippo); 2385 = 2375 + 10 (tortoise); 2390 = 2380 + 10 (hippo); 2395 = 2385 + 10 (tortoise); 2400 = 2390 + 10 (hippo); 2405 = 2395 + 10 (tortoise); 2410 = 2400 + 10 (hippo); 2415 = 2405 + 10 (tortoise); 2420 = 2410 + 10 (hippo); 2425 = 2415 + 10 (tortoise); 2430 = 2420 + 10 (hippo); 2435 = 2425 + 10 (tortoise); 2440 = 2430 + 10 (hippo); 2445 = 2435 + 10 (tortoise); 2450 = 2440 + 10 (hippo); 2455 = 2445 + 10 (tortoise); 2460 = 2450 + 10 (hippo); 2465 = 2455 + 10 (tortoise); 2470 = 2460 + 10 (hippo); 2475 = 2465 + 10 (tortoise); 2480 = 2470 + 10 (hippo); 2485 = 2475 + 10 (tortoise); 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2675 = 2665 + 10 (tortoise); 2680 = 2670 + 10 (hippo); 2685 = 2675 + 10 (tortoise); 2690 = 2680 + 10 (hippo); 2695 = 2685 + 10 (tortoise); 2700 = 2690 + 10 (hippo); 2705 = 2695 + 10 (tortoise); 2710 = 2700 + 10 (hippo); 2715 = 2705 + 10 (tortoise); 2720 = 2710 + 10 (hippo); 2725 = 2715 + 10 (tortoise); 2730 = 2720 + 10 (hippo); 2735 = 2725 + 10 (tortoise); 2740 = 2730 + 10 (hippo); 2745 = 2735 + 10 (tortoise); 2750 = 2740 + 10 (hippo); 2755 = 2745 + 10 (tortoise); 2760 = 2750 + 10 (hippo); 2765 = 2755 + 10 (tortoise); 2770 = 2760 + 10 (hippo); 2775 = 2765 + 10 (tortoise); 2780 = 2770 + 10 (hippo); 2785 = 2775 + 10 (tortoise); 2790 = 2780 + 10 (hippo); 2795 = 2785 + 10 (tortoise); 2800 = 2790 + 10 (hippo); 2805 = 2795 + 10 (tortoise); 2810 = 2800 + 10 (hippo); 2815