

Name: _____ Date: _____ 4th Grade - MRS. BESONEN'S CLASS



SNOW DAY CHOICE BOARD

DIRECTIONS

1. CHOOSE AT LEAST ONE ACTIVITY FROM EACH COLUMN TO COMPLETE DURING TODAY'S SNOW DAY.
2. HAVE AN ADULT INITIAL EACH BOX THAT YOU HAVE COMPLETED.
3. TURN ALL COMPLETED WORK INTO TEACHER WHEN YOU RETURN TO SCHOOL.
4. ONLY STUDENTS RECEIVING SPEECH SHOULD DO SPEECH/LANGUAGE SQUARE AT BOTTOM OF SHEET.

MATH	READING	PHY ED/ MUSIC/ART	SPELLING	WRITING	FAMILY
<p>Spend 20 minutes Multiplication / Division Practice (worksheet)</p> <p>Initials: _____</p>	<p>Read to self for 20 minutes</p> <p>Title: Pages:</p> <p>Initials: _____</p>	<p>Exercise for 20 minutes</p> <p>Initials: _____</p>	<p>Write spelling words in cursive</p> <p>Initials: _____</p>	<p>Write 1-2 paragraphs about what you did on your snow day</p> <p>Initials: _____</p>	<p>Clean your bedroom</p> <p>Initials: _____</p>
<p>Do a math worksheet</p> <p>Initials: _____</p>	<p>Read to a family member or friend for 20 minutes</p> <p>Initials: _____</p>	<p>Sing songs or write your own song</p> <p>Initials: _____</p>	<p>Write each spelling word in a complete sentence</p> <p>Initials: _____</p>	<p>Write a summary of a book you read</p> <p>Initials: _____</p>	<p>Help with dishes</p> <p>Initials: _____</p>
<p>Spend 20 minutes on Prodigy or /Sumdog</p> <p>Initials: _____</p>	<p>Do a reading worksheet (Wonderopolis worksheet)</p> <p>Initials: _____</p>	<p>Create a picture of your choice using what you have at home to create with (hint...can use outside view)</p> <p>Initials: _____</p>	<p>Write your spelling words in ABC order.</p> <p>Initials: _____</p>	<p>Write a letter to a classmate</p> <p>Initials: _____</p>	<p>Play a family game (board game, hide & seek, cards)</p> <p>Initials: _____</p>

Questions about today's assignment? Please contact your child's teacher:

Teacher's Name: Mrs. Besonen

Teacher's E-mail: abesonen@lqpv.org

ClassDojo

SPEECH/LANGUAGE:

Read a story. Listen for your sound. Repeat the word or sentence, based on level you are working at. Retell the story using slow and easy speech. Discuss the story with your parents.

Initials: _____



Welcome to your ELA Wonderopolis lesson!

Each snow day lesson for 4th grade will be from wonderopolis.org. Each snow day you will read/ listen (if you have internet access) to a "Wonder of the Day." Next, on a whole sheet of notebook paper, write down 5 of the Wonder Words. For each Wonder Word, you must write the given definition and use this word in an original sentence.

Example: My word is ***prioritize***. The given definition is *give a priority to*, and my sentence is:

I need to prioritize my homework before playing video games.

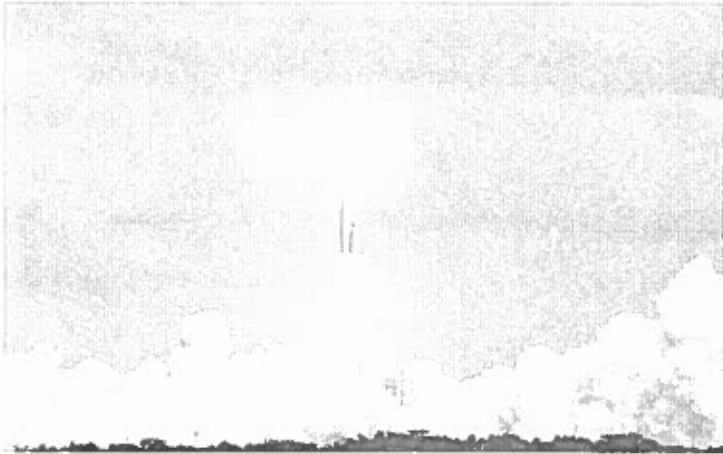
Please include the title of the "Wonder of the Day," your first/last name, and the date of the snow day at the top of your paper.

Please turn in the following school day at the beginning of class.

Wonder of the Day #208

What Do Astronauts Eat In Space?

80 Comments



SCIENCE – Earth and Space

Have You Ever Wondered...

- What do astronauts eat in space?
- How are freeze-dried foods made?
- How did the space shuttle Endeavour get its name?

No one delivers pizza in space. It's sad but true. If you want to grow up to be an astronaut someday, don't do it for the fancy meals!

Eating in space presents some unique challenges for astronauts. Why? There's no gravity! If you let go of a piece of food, it will float off and drift around your space vehicle.

What about a cup of water? Forget it! Water won't stay in a cup. It, too, will float out and hang in the air.

To allow astronauts to stay in space for days or weeks at a time, scientists had to invent special ways of packaging and eating foods in space. The first such space foods were soft foods (kind of like baby food!) packaged in tubes like toothpaste.

For example, John Glenn became the first U.S. astronaut to eat in space when he ate applesauce from an aluminum tube during a 1962 Mercury space mission. He had to squeeze the food into his mouth.

If that doesn't sound very appetizing to you, you're not alone. Astronauts weren't crazy about it either. Eventually, scientists developed better, tastier foods that were easier to eat.

For example, freeze-drying was a technique that was developed. Food was cooked, quickly frozen, and then dehydrated in a special vacuum chamber. Freeze-dried food didn't need to be refrigerated and would last a long time.

To make most freeze-dried foods, astronauts squeeze water into the food packages and then eat the food after it absorbs the water. Astronauts can use hot water to make hot meals that are tasty and nutritious.

Some freeze-dried foods, like fruit, can be eaten dry. In fact, you may eat astronaut food from time to time without realizing it. Today, many breakfast cereals include freeze-dried fruits, like strawberries, that are delicious and add color and flavor.

Astronauts flying modern space shuttle missions now eat many of the same foods they eat on Earth. Food still needs to be dehydrated or prepared in special ways, but space shuttles now have full kitchens with hot water and an oven.

Astronauts can also use condiments, like ketchup, mustard, and mayonnaise, in packets to add flavor. Salt and pepper can be used, too, but they have to be used in a liquid form because otherwise the grains would just float away!

Drinks are also dehydrated and kept in powder form in special pouches. The pouches have built-in straws or special nozzles that let astronauts drink straight from the pouch since gravity makes drinking from a cup a messy idea.

To make sure their food doesn't float off, astronauts attach their food containers and utensils to special trays with Velcro fasteners. The trays also fasten to their laps, so they can enjoy a meal while sitting down.

Nutritionists plan astronaut meals to make sure they get all of the nutrients and vitamins they need to perform their important work in space. Some astronauts begin to experience digestive problems after they've been in space a long time.

Experts believe these problems may be caused by a decrease in the number of "good" bacteria in astronauts' bodies. A group of high school students in Jefferson County, Kentucky, is going to help researchers learn more about this issue when the students' experiment flies into outer space on the space shuttle Endeavour.

As part of the Student Spaceflight Experiments Program, the students designed an experiment to test the effect of microgravity on Lactobacillus GG, which is a probiotic that could help future astronauts stay healthier in space.

In total, there are 16 experiments on Endeavour that were designed by students. This is only appropriate since Endeavour is the only space shuttle named by children. Elementary and secondary students competed in a national shuttle-naming competition in 1988.

The winning name – Endeavour – was based on an 18th-century British exploring vessel. The name has caused a bit of confusion at times, though. Many people want to spell it “Endeavor” since that’s the American spelling of the word. The space shuttle, however, uses the British spelling with a “u” because that’s how its namesake was spelled.

Wonder Words (18)

ASTRONAUT, GRAVITY, PACKAGING, ALUMINUM, DEHYDRATED, VACUUM, CHAMBER, ABSORB, NUTRITIOUS, CONDIMENT, POUCH, NOZZLE, UTENSIL, DIGESTIVE, BACTERIA, PROBIOTIC, APPLESAUCE, REFRIGERATED

Wonder What’s Next?

If you’re coming to Wonderopolis tomorrow, don’t forget to bring your cape!

Try It Out

Are you ready to learn more about foods in space? Find a friend or family member to help you check out the following activities:

All over the world, children of different cultures and nationalities stare at the sky and WONDER. Their imaginations are as limitless as the universe itself. Outer space gives families the perfect opportunity to explore the world beyond Earth. The National Center for Family Literacy offers some helpful tips for families who want to explore Space: The Final Frontier (<http://wonderopolis.org/wp-content/uploads/2011/04/Wonderopolis-Space-Resources.pdf>) together.

Ready for an up-close look at astronaut food? Check out the NASA website to see a Space Food Tray (http://www.nasa.gov/centers/johnson/events/exhibits/html/food_tray.html) with food samples. What do you think? Does the food look good to you? Would you be willing to give up some of your favorite foods for a short while for the chance to go to outer space? As you sit down for your next meal with your family, talk about how your meal is different from what astronauts eat. Would your meal taste different in space? Would what you’re eating be easy or hard to eat in space? Why? Have fun comparing your dinner table to an astronaut’s food tray!

Want to dive deeper into issues with feeding astronauts on space missions? Explore the information and activities in NASA’s Space Food and Nutrition (https://www.nasa.gov/pdf/143163main_Space.Food.and.Nutrition.pdf) guide. What do you think the biggest problems would be in feeding astronauts on space missions that would last years? How would you overcome these problems?

Wonder Sources

<http://science.howstuffworks.com/astronauts-eat-in-space.htm>

<http://www.foxnews.com/scitech/2011/04/28/schoolchildren-named-nasas-space-shuttle-endeavour/>

<http://ssep.ncesse.org/communities/selected-experiments-on-sts-134/>

<http://www.ag.iastate.edu/centers/ftcsc/media/bookmark4.pdf>

http://magma.nationalgeographic.com/ngexplorer/0110/articles/iss_0110.html

<http://www.spacekids.co.uk/spacefood/>

<http://wonderopolis.org/wonder/what-do-astronauts-eat-in-space>

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Wonder of the Day #1941

Who Was Sitting Bull?

2 Comments



SOCIAL STUDIES – History

Have You Ever Wondered...

- Who was Sitting Bull?
- In which famous battle did the Sioux defeat General Custer?
- What other names did Sitting Bull go by during his lifetime?

Long before European settlers arrived along the eastern seaboard of what would one day become the United States of America, Native Americans thrived in numerous communities all across the continent. When you think of famous Native American icons, there's one name that might stand out – or sit! – more than others: Sitting Bull.

Sitting Bull was born around 1831 in what is now South Dakota. His family was part of the Hunkpapa people, a Lakota Sioux tribe that roamed throughout the Great Plains. Early in life, however, he was not known as "Sitting Bull." Instead, his family called him "Jumping Badger."

As a young boy, Jumping Badger was known for his quiet, steady personality. Rather than Jumping Badger, friends and family members instead gave him the nickname "Slow." That nickname would only last a few years, though.

At the age of 10, he killed his first buffalo. Then, at age 14, he got his first taste of battle in a Hunkpapa raid on a rival Crow tribe. Showing incredible bravery, he unseated a Crow warrior from his horse with his tomahawk.

To recognize his bravery, his father gave up his name and transferred it to his son. No longer Jumping Badger or Slow, he became Tatanka-lyotanka or "Sitting Bull." The name paints a picture of a buffalo bull sitting on its haunches, patient and immovable. The name fit him and he would live up to it many times over the course of his life.

As a young man, Sitting Bull was no stranger to battle. His first of many encounters with American soldiers pushing westward into Native American lands came in 1863. He became known for legendary acts of bravery in battle.

Sitting Bull was also widely-recognized as a man of great insight and vision. Considered both a holy man and a brave warrior, he became the head chief of the entire Lakota Sioux nation around 1868. Under Sitting Bull's leadership, the various Sioux tribes united together in their struggle to maintain their way of life.

After gold was discovered in South Dakota's Black Hills region in 1874, conflict with American forces increased greatly. In 1876, Sitting Bull had a premonition that his people would soon score a great victory in battle. That vision came true at the Battle of the Little Bighorn.

During that famous battle, a confederation of tribes led by famous warrior Crazy Horse defeated American troops led by General George Armstrong Custer. Although Sitting Bull was not a warrior during the battle, his many followers believed that his premonition meant he possessed magical powers that brought the victory.

Despite the victory, Sitting Bull was forced to flee to Canada, where he stayed for several years. Eventually, he surrendered and returned to the U.S. and was held as a prisoner of war at Fort Randall in the South Dakota Territory.

After two years, Sitting Bull was released and allowed to live on Standing Rock Reservation. In his later years, he still fought to prevent Sioux lands from being taken by the U.S. government. In 1885, he even spent a few months traveling with the famous Buffalo Bill's Wild West show.

On December 15, 1890, Sitting Bull was killed in an incident at Standing Rock. Tribal police had been sent to arrest him in connection with his association with the rise of the Ghost Dance, a new tribal religion that American government officials feared would lead to renewed animosity between the Native Americans and the whites in the area.

His followers attempted to help him. In the commotion that followed, one of the Ghost Dancers fired a shot at police and a short gun battle ensued. More than a dozen people died, included Sitting Bull, who was shot in the head and chest.

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Wonder Words (18)

ICONS, TRIBE, QUIET, STEADY, BATTLE, RAID, RIVAL, NUMEROUS, BUFFALO, WARRIOR, TOMAHAWK, BRAVERY, SEABOARD, THROUGHOUT, PERSONALITY, INCREDIBLE, TRANSFERRED, IMMOVABLE

Wonder What's Next?

You can count on tomorrow's Wonder of the Day to help you make some accurate guesses!

Try It Out

Are you ready to learn more about Sitting Bull? Be sure to explore the following activities with a friend or family member:

Sitting Bull is remembered for his premonition of the defeat of Custer in the Battle of the Little Bighorn. The National Park Service oversees the Little Bighorn Battlefield National Monument. Visit the NPS website's Photo Gallery (<https://www.nps.gov/libi/learn/photosmultimedia/photogallery.htm>) to see photos of the area and people involved to learn more about this famous battle.

You can also visit the NPS website Multimedia Presentations (<https://www.nps.gov/libi/learn/photosmultimedia/multimedia.htm>) page to enjoy videos that explain the history of the Battle of the Little Bighorn, as well as its aftermath. Write down at least five facts you learn from watching one or more of the videos. Share what you learn with a friend or family member.

For a brief time, Sitting Bull left his reservation to take part in Buffalo Bill's Wild West show. Jump online to read more about Buffalo Bill's Wild West Show (<https://centerofthewest.org/learn/western-essays/wild-west-shows/>). How authentic were the characters? If you were Sitting Bull, would you have taken part in the show? Why or why not?

Wonder Sources

<http://www.history.com/topics/native-american-history/sitting-bull>

<http://www.history.com/news/10-things-you-may-not-know-about-sitting-bull>

<http://www.biography.com/people/sitting-bull-9485326>

http://www.pbs.org/weta/thewest/people/s_z/sittingbull.htm

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<http://wonderopolis.org/wonder/who-was-sitting-bull>

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Name : _____

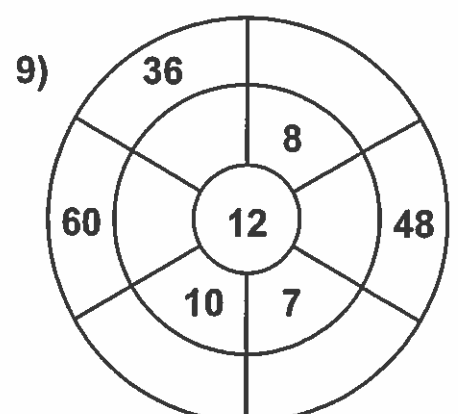
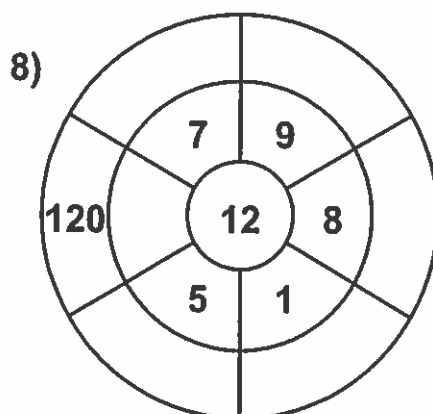
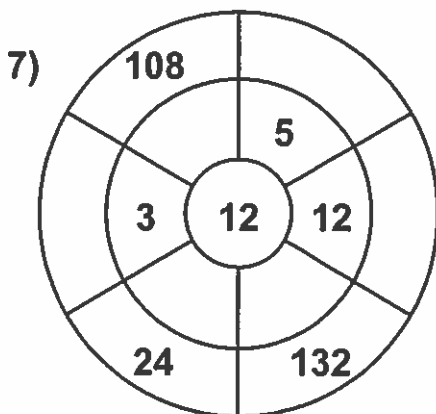
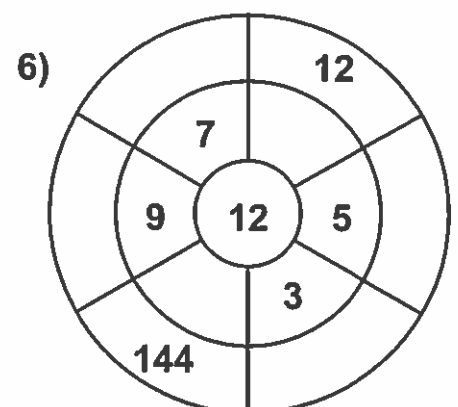
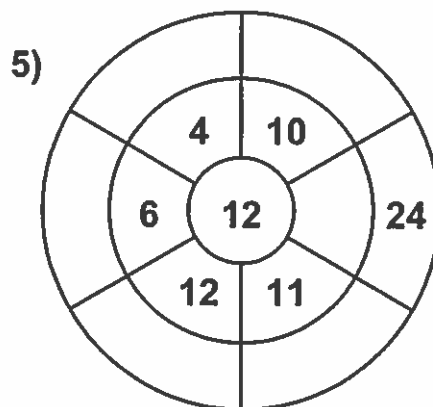
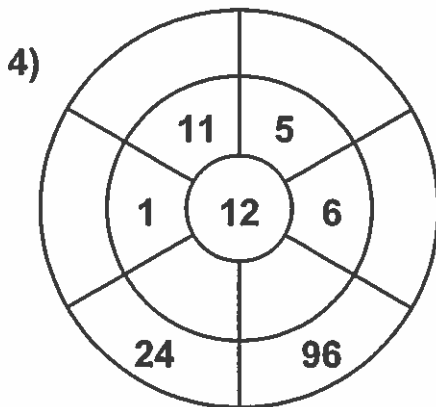
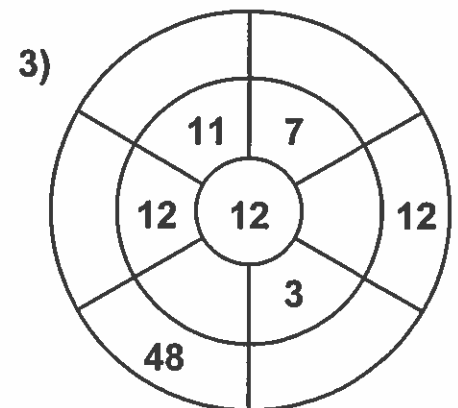
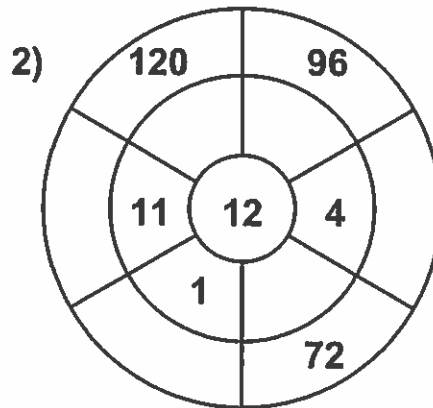
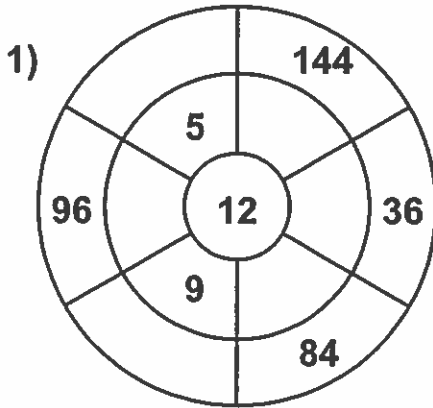
Score : _____

Teacher : _____

Date : _____

12 Times Table - Target Circles

Complete the circle by multiplying the number in the center by the middle ring to get the outer numbers.



Name _____



edHelper

Date _____

Simplify.

1. $7 - (42 \div 3) + 5 + 4$
2. $558 \div 9 - (3 - 5)$

Complete.

3. $66 + 85$	4. $39 + 73$	5. $25 + 44$
6. $90 + 41$	7. $27 + 35$	8. $73 + 72$
9. $73 + 63$	10. $51 + 38$	11. $78 + 38$

Find each ordered pair. Write the letter for the point named by the ordered pair.

12.

(6, 3) _____

(0, 1) _____

(4, 6) _____

(3, 3) _____

(0, 2) _____

13.

(1, 5) _____

(2, 7) _____

(4, 5) _____

(6, 5) _____

(6, 3) _____

(5, 6) _____

Name _____

Divide.

14. $4 \div 2 = \underline{\quad}$	15. $40 \div 10 = \underline{\quad}$	16. $15 \div 3 = \underline{\quad}$	17. $63 \div 7 = \underline{\quad}$
18. $80 \div 8 = \underline{\quad}$	19. $27 \div 9 = \underline{\quad}$	20. $42 \div 6 = \underline{\quad}$	21. $30 \div 5 = \underline{\quad}$
22. $32 \div 4 = \underline{\quad}$	23. $45 \div 5 = \underline{\quad}$	24. $18 \div 3 = \underline{\quad}$	25. $50 \div 10 = \underline{\quad}$
26. $12 \div 6 = \underline{\quad}$	27. $24 \div 8 = \underline{\quad}$	28. $49 \div 7 = \underline{\quad}$	29. $8 \div 2 = \underline{\quad}$

Solve each equation.

30. $2n = 14$	31. $12 = 6e$	32. $9 = j \div 7$
33. $d \div 8 = 6$	34. $4y = 20$	35. $36 \div s = 4$
36. $3 = 9 \div h$	37. $40 = 5v$	38. $2k = 8$

Complete.

39. Circle all of the numbers that are multiples of 2.					
90	12	1	14	65	71
48	58	87	24	4	31
40. Circle all of the numbers that are multiples of 4.					
77	48	3	20	1	10
22	80	31	90	2	16

Round to the place of the underlined digit.

41. <u>8</u> ,270,821	42. <u>2</u> 9,965	43. <u>4</u> 11,484	44. 8,2 <u>4</u> 6,227
45. <u>1</u> ,959,379	46. 426, <u>9</u> 26,925	47. 380,7 <u>8</u> 6,497	48. <u>9</u> 70,799
49. 64 <u>2</u> ,499,201	50. <u>3</u> ,034,629	51. 9, <u>6</u> 94,033	52. 77,9 <u>2</u> 4,764