

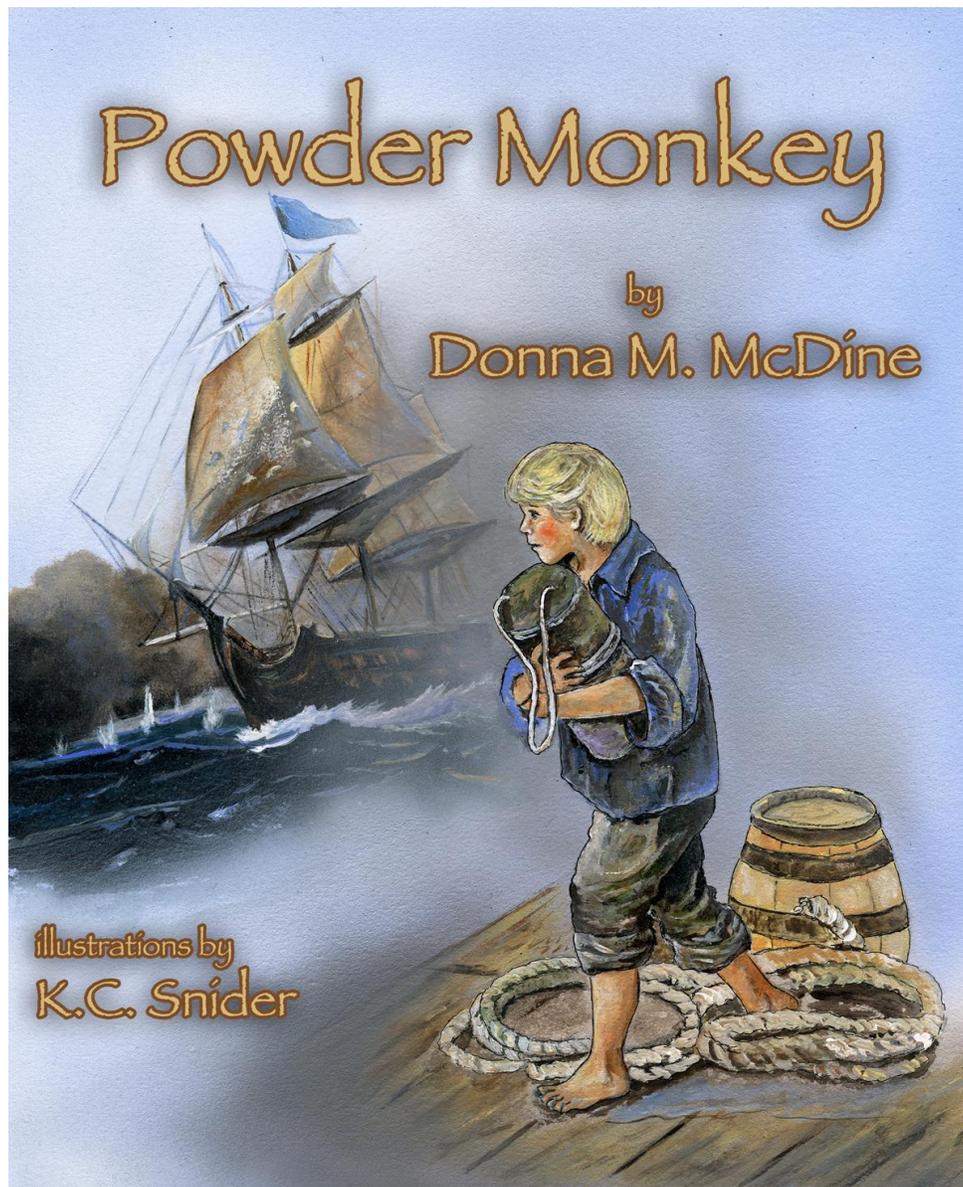
Guardian Angel Publishing, Inc.

EDUCATOR'S GUIDE

Powder Monkey

Written by Donna M. McDine

Illustrated by K.C. Snider



illustrations by
K.C. Snider

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www.donnamcdine.com

K.C.'s Website:

www.kcsniderart.com

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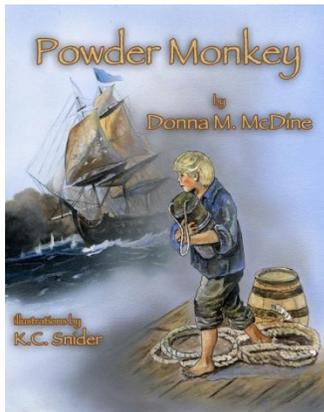
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Book Summary:

Forced into a life at sea by the Royal Navy Press Gangs, 12-year-old Tommy Kitt finds himself floating in a sea of misery. Poor living conditions and beatings occur daily. Despite his runt like size, Tommy must summon the courage and physical ability to prevail in a situation he cannot escape.

Watch the trailer for *Powder Monkey* at

Insert link here.

About the Author:



Donna McDine is an award-winning children's author, Honorable Mention in the 77th and two Honorable Mentions in the 78th Annual *Writer's Digest* Writing Competitions, Literary Classics Silver Award & Seal of Approval Recipient Picture Book Early Reader, Readers Favorite 2012 International Book Awards Honorable Mention, Global eBook Awards Finalist Children's Picture Book Fiction, and Preditors & Editors Readers Poll 2010 Top Ten Children's Books ~ *The Golden Pathway*.

Donna's recent releases of *Powder Monkey* and *Hockey Agony* will be joined by two more books to be published by Guardian Angel Publishing, *A Sandy Grave*, and *Dee and Deb, Off They Go*. She writes, moms and is a personal assistant from her home in the historical hamlet Tappan, NY. McDine is a member of the SCBWI, Children's Literature Network, and Family Reading Partnership. Visit www.donnamcdine.com.

Interview with the author, Donna McDine:

Q. How did you come up with the idea of writing about Royal Navy press gangs and their practice of sometimes taking young boys from their homes and putting them aboard ships to become powder monkeys?

A. I have always been interested in history, both American and abroad. When a publisher announced a call for historical fiction manuscripts for 8-12 years of age I jumped at the opportunity. Intrigued and dismayed about the history of press gangs for the Royal Navy in the late 1700s I began my research and created fictional characters within the true occurrences of impressments.

Q. How much research did this story involve? How do you find sources? What advice can you give to other writers, teachers, or students about doing historical research in order to write a story like *Powder Monkey*?

A. I researched this topic through the library database and requested non-fiction books to be held for my in-person research sessions. This saves a lot of time prior to my arrival so I can get right down to the task at hand. I always leave my cell phone at home when researching at the library or elsewhere (or at least in the car) so I'm not interrupted and don't disturb other library patrons. The peaceful atmosphere with no distractions is a true Godsend.

Reading, studying, and taking extensive notes on the late 1700s Royal Navy and press gangs material was instrumental in developing the accurate details. I then moved onto doing the same type of research with different types of historical fiction children's book to create believable characters to be intertwined into the historical facts bringing *Powder Monkey* to life.

Q. What is your favorite thing about being an author?

A. Watching the wonder of learning spreading across a child's face to teachers and parents saying they too learned something new through my books.

Q. If you could begin your career as an author again, what would you do differently, and why?

A. I would have to say not to get too caught up with social networking and not spread myself too thin with my online chat groups where I can't participate. While it's wonderful to connect with people via cyberspace, spending valuable writing time with too much socializing results in less and less writing time.

Q. When you do school visits, what questions do students ask most about writing, your stories, or your career as an author?

- A. The questions vary with each grade level. The younger one's tend to lean toward how do you come up with your stories and the older children ask if my character's are based on anyone I know and how much do I earn as an author.

About the Illustrator:



K.C. Snider, a prominent Oregon artist, has branched out into a variety of styles and subjects. Her collection of oil paintings, lithographs, and pencil drawings include the All-American Cowboy and Cowgirl and their historical lifestyles with magnificent wolves, buffalo herds, eagles and birds of prey along with horses and domestic animals. Her artwork has won numerous awards including the Snaffle Bit Award and Pioneer Award.

Snider lives in the high desert with majestic views of the Cascade Mountains' snow capped peaks. K.C. also illustrates children's books: Alleycat; The Christmas Angel; Preston, the Not-So-Perfect Pig; One Family's Christmas; Cartwheel Annie; The Magic Violin; The Golden Pathway; Does Heaven Get Mail?; Andy & The Albino Horse Series; Baby Jesus is Missing; Katydidn't; A Short Tale About a Long Tail; Monster Maddie; RV Mouse & Ruthie and the Hippo's Fat Behind.

A three piece triptych from the second book in the Andy & the Albino Horse Series won 1st Place in The Western Art Roundup 2008, and another Andy story triptych won 2nd Place in The Western Art Roundup 2009.

Interview with illustrator, K.C. Snider:

Q. Can you tell a bit about the life of an illustrator?

- A. Being an illustrator is all I've dreamed about doing since I was 10 years old. It consumed me. Reading each story is exciting and that builds excitement for what illustrations I may need. They start forming in my mind as I go along. I work with the notes on the manuscript for the scenes, emotions, characters to be depicted at that moment. I start with the book cover first. This will be the anchor to how the entire story board will go.

Q. Do you have a set schedule?

- A. Discipline requires it, but I can start and stop when I want to. Generally it works out to an 8 hour day or more, even if I am still working at 2am.

Q. When you are assigned a new story, what is the process for developing your illustrations?

A. I begin the research to make sure my illustrations match the story as well as the historical accuracy and background. Then I go to the internet or library for details and ideas. I usually work free hand about also use a light board and tracing paper for consistency. I start with the background and move forward to the foreground. I choose what my characters will look like and decide what format the illustrations will take, cartoon, realistic, detailed, simplistic, and the staging of the characters.

Q. Do you consult with the author or publisher regularly or do you work more independently?

A. I definitely work closely with the author and the publisher for a more cohesive story. Sometimes my best ideas are from the author or publisher! All three of us need to feel good about the illustrations, that they “fit” the story as we imagined them.

Q. What is your favorite thing about being an illustrator?

A. I get to paint scenes from all over the world and throughout time. There are no limits to what I am able to do as an illustrator, where as in fine art, one is limited or stuck in a particular genre.

Q. What are your favorite types of projects?

A. I prefer projects with people and animals rather than abstract or static landscapes. I like action, a picture that can tell a story all by itself.

Q. What advice can you give to young people who are interested in becoming illustrators?

A. Be prepared to work hard, be very self-disciplined and focused. Do not expect to make a lot of money. Become diversified in your style of illustrations, the more you can do, the more work you will get. Get the appropriate education.

Q. What other projects or assignments do you have on the docket?

A. I have 9 books lined up to do within the next 12 months. The number of illustrated pages ranges from 10 to 17 plus the covers. Some are historical, some are in a series, some are comical, and one is all illustrations, but no words.



Discussion:

Overview of Powder Monkey And Royal Navy Impressment Practices:

Before reading *Powder Monkey*, have a discussion with students about Royal Navy press gangs in the 18th and 19th centuries. At the time, life in the Royal Navy was so rough that these gangs roamed the English countryside looking to kidnap men—and even young boys—to serve at sea, as very few wanted to join voluntarily. Members of press gangs were often harsh and cruel as they took men and boys from their homes, usually resorting to violence or deception to get the job done.

Boys as young as eleven were abducted and most often forced to become powder monkeys, or the ones who passed filled cartridges from the magazines below decks to the sailors who manned the cannons during battles. The job was very dangerous as these younger boys were used on the gun decks to move powder from hatchways to the guns and to douse down loose powder around the guns to prevent explosions. Life at sea was difficult for everyone, but especially for these young boys who had no experience about living and working on a ship. They had no choice but to learn to make the best of circumstances. . . or suffer the consequences.

Questions:

1. Why was Tommy hiding?
2. What did their parents do?
3. What happened to their parents as a result of their actions?
4. Why did Tommy come out of his hiding place?
5. Who took Tommy and James and where were they taken? How many other boys were taken?
6. How were the boys supposed to get on the ship?
7. What happened to the weaker boys as they tried to climb the rope?
8. What was each boy given by the Boatswain's Mate?
9. What happened to Tommy as he made his way below deck to the foul-smelling area?
10. What was the reaction of the seaman who followed him?
11. What were Tommy's jobs?
12. Why were Tommy and the other boys made to practice drills and learn to use muskets and cannons? Was the training important? Why?
13. Why did the seaman call Tommy a powder monkey?
14. What happened to James? How did Tommy react?
15. What happened to Tommy's hearing?
16. Tell more about Tommy's life as he grew up. What did he do?

Activities:



Language Arts:

Journal Entry:

Have students pretend they have been abducted by a Royal Navy press gang and forced into service as a powder monkey aboard a ship. Let them write a journal entry describing the experience, including both activity and emotions. Do they feel anger, terror, hopelessness, or excitement? How will they respond and cope? How are other impressed boys/men reacting? What will happen if they try to escape? What will the future hold?

Photograph Inspired Story:

Give students a copy of the photograph of the young boy/powder monkey (included in resources) leaning up against a cannon. Have them write a story about this boy, and consider the following: How did he get aboard the ship? How old is he? What happened to his family? What do you make of the interesting expression on his face? Does he look happy—or simply resigned to the life he is leading? In the second photo (for reference only), students can see how heavy the cartridges must have been and how ‘stooped over’ and ‘monkey-like’ the boys looked as they carried their loads. Consider additional ‘story starter’ questions.



Word Search:

Have students complete the *Powder Monkey Word Search*. (The worksheet and answer key are in the resource section at the end of the guide).

Vocabulary Exercises:

Write these words on the chalkboard. You can add/substitute more words of your choice.

Impressment	Powder Monkey	Cannon	Gun Powder	Navigation
Cartridge	Royal Navy	Sailor	Magazine	Sails
Rigging	Midshipmen	Deck	Seaman	Boatswain’s Mate

- Have students write the words in alphabetical order.
- Have students use a dictionary to give a short definition of each word.
- Have students choose three or four of the words and write a short paragraph about the responsibility of a powder monkey.

Nautical Language:

For a comprehensive list of nautical terms/definitions, visit the See the Sea ‘Nautical Language’ page at <http://see-the-sea.org/nautical/naut-container.htm>.



Integrated Language Arts/Social Studies Activities:

 Divide students into small groups (4-5 students in each group) and let them choose one of the following topics (or one of your choice) to research after reading *Powder Monkey*.

● **Topics:**

1. Navigation/Tools/Constellations
2. Powder Monkey
3. Types of Ships
4. Press Gangs
5. Impressment—especially of young men/boys
6. Sea Currents/Tides
7. Sanitation at Sea
8. Parts of a ship (decks/rigging/etc.)
9. Life at Sea/Activities on a Ship
10. Living Quarters
11. Levels of command/Jobs/Rank
12. Military/Drills
13. Munitions (Muskets/Cannons/Gun Powder/Other Weapons)
14. Sea Life vs. Farm Life
15. Obeying orders vs. Punishment (and types of punishment)
16. Royal Navy
17. England in the 1700s/1800s
18. Pirates
19. Sea Battles
20. Quota System vs. Impressment
21. War of 1812 (as related to impressment of American seamen by the British)
22. HMS Victory

 Students will create a ‘presentation’ board (poster board sized foam-core is good) with at least five key points to share with the rest of the class. Students should find appropriate visuals and information to put on the presentation board. Each member of the group should share at least one key point pertaining to the topic during the presentation. If you have the resources and older students, consider letting them create a Power Point presentation in groups of two or three.



Social Studies:

Timeline:

Have students research and read from a variety of books about naval history or check out online resources such as <http://www.royalnavalmuseum.org/>, <http://www.bbc.co.uk/history/british/> or <http://www.seahistory.org/>.

- Let them document or create/draw timeline figures for the most important events and place them on a classroom timeline of Royal Navy history (as pertaining to impressment and sea battles). They can include such events as Quota System which was begun in 1795, or the Battle of Trafalgar and the HMS Victory with Admiral Nelson, etc. The timeline could begin in 1664 when the practice of impressment to crew warships began and end with War of 1812 when the practice ceased.

Mapping/Geography:

Since impressed men and boys were usually taken to crew warships, they saw lots of action in sea battles during wartime. The website <http://britishbattles.com> has a list of English battles listed down the left-hand side, and sea battles are marked with an anchor icon. Focusing on British sea battles occurring between the years of 1664 and 1812, have students mark the location of each battle on a large classroom world map. Label each battle and the year it occurred with a small pinned flag. On a separate sheet of paper, have students list the battles and a short description of the reason for each battle, action, location, dates, and countries/important historical figures involved. Most of the sea battles during these years were part of the Napoleonic Wars.



Mathematics:

Navigation: For Older Students

Long ago, sailors had to have excellent skills in navigation in order to travel in the right direction and reach their desired destinations. They didn't have the tools, such as GPS, that we have today, so it was important for them to know how to get from place to place. And one small error could result in a huge mistake.

The following free lesson plan PDFs about navigation are from [The Institute of Navigation](#), and are geared to seventh grade. However, there are suggestions to use with 6th and 8th graders as well. Each lesson includes motivations for the students, background and

assessment material for the teacher and mentor, activity descriptions and worksheets, and additional tips and resources. The activities are designed to have minimal cost and to be completed in 1-3 hours by a class of 28 students. There are 10 lessons in all, but included here are lessons 1-7.

- Lesson 1: Where Is Here?
<http://www.ion.org/satdiv/education/lesson1.pdf>
Introduction to navigation, latitude, longitude, maps and compasses.
- Lesson 2: How To Be A Great Navigator
<http://www.ion.org/satdiv/education/lesson2.pdf>
Teaches dead reckoning and celestial navigation.
- Lesson 3: Navigating By the Numbers
<http://www.ion.org/satdiv/education/lesson3.pdf>
Introduces trigonometry in navigation, time-distance formulas and triangulation.
- Lesson 4: Getting It Right
<http://www.ion.org/satdiv/education/lesson4.pdf>
Teaches effects of errors, corrections and geometry in navigation.
- Lesson 5: Topo Map Mania!
<http://www.ion.org/satdiv/education/lesson5.pdf>
Teaches how to read and use topographical maps, and how to use a compass.
- Lesson 6: Getting To The Point
<http://www.ion.org/satdiv/education/lesson6.pdf>
Introduces how to find position by triangulation.
- Lesson 7: By Land, Sea, or Air
<http://www.ion.org/satdiv/education/lesson7.pdf>
Compares maps and navigation in different environments.

Calculations

- **Distance:**
Sailors measure the speed of their vessel in knots per hour. Have students compare and convert automobile speeds (since they are familiar with this concept) into knots per hour, even though car speed is not usually measured in knots. For example, if a car travels at 50 MPH, what would that be in knots per hour? 55 MPH? 60 MPH? 65 MPH? And so on. Use this formula:

1 knot = 1 nautical mile per hour = 6076 feet per hour
1 mph = 1 mile per hour = 5280 feet per hour

To do this type of problem easily, one can multiply the number of miles per hour that the car is moving by the number of feet per hour that = 1 mph. this converts the speed to a distance traveled in one hour. For example:

$$(50 \text{ mph})(5280 \text{ feet/ mph})=264,000 \text{ feet}$$

Now, divide that distance by the number of feet in a nautical mile (6076).

$$(264,000 \text{ feet})/(6076 \text{ feet/ knot}) = 43.4 \text{ knots}$$

● **Nautical Math Measurement Activities:**

More great nautical math activities and terms can be found at:

<http://www.cccoe.net/lifeatsea/teacher/mathatsea.pdf>

● **Bell Time:**

The passage of time aboard ships was observed by a ringing bell. To find out more about bell time, check out: <http://www.cccoe.net/lifeatsea/student/math.htm>

● **Measuring Wind Speed/Make a Homemade Anemometer:**

Wind was important to sailors—no wind, no sailing! In addition, they had to be able to gauge wind speed. Have students construct an anemometer (an instrument that measures wind speed), then use it to measure wind speed. Instructions for making an anemometer and calculating winds speed can be found at:

http://www.ehow.com/how_5851307_build-homemade-anemometer.html



● **Make a Wind Gauge:**

Another site that shows how to make a wind gauge and measure wind speed can be found at: <http://pbskids.org/cyberchase/activities/how-windy-it/>

● **How Many Years?**

The practice of impressing men and boys into service for the Royal Navy during wartime began around 1664 and ended with the war of 1812. How long did the practice last?

🍴 **Recipe Math:**

Use the following activities (PDFs from www.asailorslifeforme.org) to introduce students to an 1812 sailor's diet and food/recipes.

● **A Sailor's Diet In Weights and Measures Activities:**

<http://www.asailorslifeforme.org/educator/lessons/A-Sailors-Diet-in-Weights-and-Measures.pdf>

- The following chart listing a sailor's weekly diet/food chart will also be needed in order to complete the 'Sailor's Diet' activity above:

<http://www.asailorslifeforme.org/educator/activities/1812-Navy-Sailors-Weekly-Diet-Chart-Dinnertime-Sailors-Eating.pdf>

- **Make 1812 Hot Chocolate:**

<http://www.asailorslifeforme.org/educator/activities/1812-Hot-Chocolate-Recipe-Dinnertime.pdf>

- **Bake A Ship's Biscuit:**

<http://www.asailorslifeforme.org/educator/activities/Ship's-Biscuit-Recipe-Dinnertime-Sailor's-Eating.pdf>



Science:

- 🔧 **Make A Wind Vane:**

http://www.education.com/activity/article/wind_vane_first/

- 🔧 **The Story of Navigation**

<http://www.boatsafe.com/kids/navigation.htm>

- 🔧 **Navigating By the North Star**

As mentioned in the Math section, early mariners relied on the North Star to help them get their bearings and navigate, especially when they were out at sea with no recognizable landmarks around them. Like the sun, the North Star is constant—it doesn't move. Therefore, it was perfect to use as a set point for navigating.

However, sailors did need special instruments and tools in order to use the North Star as a reference. One such tool was a sextant, which helped them measure angles between stars and determine their latitude on a map.



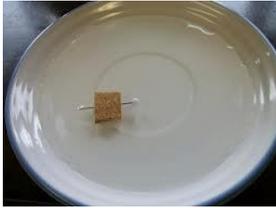
- 🔧 **Make a Sextant:**

The following link is to a website (science-teachers.com) that has activities for making a crude sextant using classroom materials and using it to determine the angle of elevation relative to the horizon of the North Star. This angle is in fact equal to the latitude they are on.

http://www.science-teachers.com/north_star.htm

Make a Compass:

What happened when storms or clouds obscured the sky for days and nights on end? How did the sailors navigate without being able to use the stars as a guide? One of the most important improvements to ocean navigation was the invention of the compass, as it enabled sailors to find magnetic north or south.



- The following link is to an activity on the NOAA website that teaches students how to make a simple compass using a needle, magnet, and piece of cork.
http://oceanservice.noaa.gov/education/for_fun/MakeyourownCompass.pdf.

Moon/Gravity/Tides:

Sailors must have a precise understanding of tide and water levels when entering or leaving port. Sometimes big ships have very little clearance between their bottom (keel) and the bottom of the sea, therefore even early mariners had to learn to calculate tide levels in order to navigate safely.

- Discuss the following with students:
 1. What is a tide?
 2. What causes tides?
 3. How are tides predicted?
 4. What would happen to a ship if the tide was out and the water level was too low to enter or leave a port?
- The following link has some excellent information about tides, how they occur, and how they affect navigation at sea. <http://www.brighthubengineering.com/seafaring/25990-tides-how-they-occur-and-how-they-affect-navigation-at-sea/>
- For more background information about how the moon affects tides, see <http://www.usc.edu/org/seagrant/Education/IELessons/Unit1/Lesson4/U1L4VB.html>.
- For a fun group activity that teaches how the gravitational pull of the moon causes tides, see <http://www.usc.edu/org/seagrant/Education/IELessons/Unit1/Lesson4/U1L4A.html>.

Sea Currents:

In addition to knowing about the night sky and tides, sailors also had to understand about sea currents, which put motion in the ocean! While tides involve water moving up and down; currents involve the movement of water back and forth. Currents are driven by several factors. Tides are one of these. Wind, the shape of the land, and even water temperature are other facts that drive currents.

- Discuss the importance of sea currents with students. For more background information, go to http://oceanservice.noaa.gov/education/tutorial_currents/welcome.html.

- **Podcast About Sea Currents:**

Listen to a podcast and learn about sea currents in an interview with Laura Rear from the Center for Operational Oceanographic Products and Services. The discussion highlights the difference between tides and currents, how we monitor currents, and how we use current data every day. (18:44 minutes) This podcast is from the National Ocean Service website.

http://oceanservice.noaa.gov/podcast/supp_aug09.html#currents

- 🚢 **Animals On Board:**

Tommy was responsible for cleaning the manger of the livestock below deck. He didn't mind the task because it gave him a chance for peace since the other boys shied away from the job.

Discuss the concept of having livestock aboard ship. What kinds of animals were kept? Have students research the topic and discuss why those specific animals were often chosen. What kinds of meals could sailors have to eat because of the specific livestock on board? Discuss the care of the animals and the cleaning tasks of their area below deck.

For more information, see http://www.asailorslifeforme.org/educator/scene_sailors-aloft.php.



Science and Technology:

- 🚢 **Munitions-Weapons and Ammunition:**

Although the Royal Navy had different types of ships, most of them were equipped with cannons and gunpowder. The ammunition was stored below deck (and below the water line), as it would have been a fire hazard to keep a lot of ammunition on deck. The magazine had to be where an enemy's cannon could never get a direct hit, or the whole ship could blow up. Additionally, it would probably add too much weight to have ammunition above the water line. Therefore, the powder monkeys had to hurry below deck to the magazine to get fixed charges of powder/shot and carry it back up to the sailors manning the cannons.

Of course, there were also other weapons on board such as firearms, daggers, knives and cutlasses for hand-to-hand combat, when it resulted.

- Have students research and discuss the different types of weapons used by sailors aboard Royal Navy ships. Discuss. What was the purpose of each weapon?

- Discuss the use of gunpowder. Who is credited for its invention? What was it made of? Although it can explode, it is mainly used as a propellant? Why was this important for firing cannons? More information about the invention and history of gunpowder can be found at <http://chemistry.about.com/od/historyofchemistry/a/gunpowder.htm>.
- Sailors had to understand the danger and importance of the chemical reaction of gunpowder in cannons. Have students build an Alka-Seltzer cannon with this activity: <http://www.asailorslifeforme.org/educator/lessons/Chemical-Processes.pdf>.
- For a fun activity, compare today's Royal Navy's weapons systems with those from the past. See <http://www.royalnavy.mod.uk/The-Fleet/Ships/Weapons-Systems> for modern weapons systems.
- Optional: Online game called 'Pass the Powder' where a player races against the clock to take powder to his/her cannon. <http://www.asailorslifeforme.org/powdermonkey.php>.
- Optional: Powder Monkey Relay Game at: <http://www.asailorslifeforme.org/educator/activities/Powder-Monkey-Relay-Competition-Magazine-in-Battle.pdf>

The object of the relay:

The team of 4-5 students must successfully toss every "gunpowder cartridge" all the way from the "Magazine" to the "Gun" while overcoming all obstacles.



Health, Hygiene, and Personal Safety:

Diet and Deficiencies:

After a ship was out at sea for a while, supplies would get low, and fresh food and water were not available for the sailors. Staples then would include salt meat, ale or grog, fish, and some sort of ship biscuit. However, even the biscuits might be filled with weevils or maggots. Poor ventilation, storage problems, insufficient drainage, rats, and other vermin also added to food decay.

A poor diet caused many problems and serious health conditions and malnutrition. One such condition was scurvy, caused by a lack of Vitamin C, which resulted in rotting skin and gums...leading to tooth loss. Finally, it was discovered that keeping citrus fruit on board the ship for sailors to eat would help solve the problem.

Water purity was also a major issue. When water was stored in barrels for months on end, it became stagnant and useless—if it lasted that long. And drinking impure water could

cause sickness. Therefore, most of the time sailors (even young boys) were given daily rations of grog (a mixture of water and rum) to drink.

- Discuss the importance of a healthy diet and fresh water. Have students research vitamin and nutrition deficiencies and the resulting health conditions that can occur if the deficiencies are not addressed. Compare a healthy diet of today with a sailor's diet of the past.

Sea Legs/Motion Sickness:

Many people experience motion sickness, and on boats or ships, this condition is known as sea sickness. Sailors always referred to learning to sail on a ship without getting sick as getting one's 'sea legs.'

Motion sickness of any kind is not fun! Those who suffer usually experience nausea, dizziness, and vomiting. Many of the young boys and men who were pressed into service aboard a ship had never been out on the sea, and a lot of them experienced violent sea sickness. Of course, the seasoned officers and crew did not have much sympathy, and they expected the new recruits to deal with the sickness and carry on—or else!

Fortunately, most of the boys and men did get their sea legs, after their bodies adjusted to the ship's motion on the waves.

- What causes motion sickness/sea sickness? Have students research the cause. According to information from several sources, motion sickness/seasickness is caused by a conflict between what your body sees or senses, and what your internal body parts feel and sense. When you are on a boat, your inner ear may feel the waves moving the boat, but your other senses, such as sight, may not see what is causing the motion. This causes your eyes and your inner ear to send conflicting messages to your brain on what they are experiencing. Your brain reacts to this conflict by making you feel sick.
- Discuss motion sickness with students. Have students ever been sea sick in particular? How did it make them feel? How did they get over it? Have them imagine being a young boy (pressed into service, away from home and family) and experiencing sea sickness. What would they have to do to get their sea legs? How would it feel to be in that situation?

Ear Care/Loss of Hearing:

Sailors aboard Royal Navy ships (or any ship equipped with armament) were prone to hearing loss due to booming cannons, especially since this usually involved exposure over long periods of time.

More information about noise induced hearing loss can be found at the National Institute on the Deafness and Other Communication Disorders (NIDCD) website at:

<http://www.nidcd.nih.gov/health/hearing/pages/noise.aspx>.

- Have students learn the parts of the human ear, and research and discuss hearing loss. A labeled diagram of the ear, activities, and printable worksheets can be found at: <http://www.enchantedlearning.com/subjects/anatomy/ear>.
- More hearing and sound wave activities (including creating a crawl-through ear model for younger children) can be found at: <http://www.squidoo.com/five-senses-hearing-and-sound-waves-lesson-plan>.

Personal Hygiene/Sanitation:

Bathing and personal hygiene were not always the most important things in a sailor's life. Fresh water was always an issue, but simply surviving and working took precedence over cleanliness. Due to cramped living conditions, lack of fresh food, and poor ventilation, disease was common and easily spread as well. Therefore, good hygiene was very important for keeping disease at bay.

However, Captain James Cook, the famous British explorer and sailor in the late 1700s, took his sailors' health and wellness seriously. He was one of the first to implement practices of cleanliness and hygiene among his crew. You can read more about his health measures and suggestions at: <http://shipmodeling.info/life.htm> and http://www.etchforhealth.com/news/capt_cook_preventive_health.html.

- Have students discuss what life at sea must have meant in terms of cleanliness and hygiene. Talk about healthy practices and how the sailors might have solved their hygienic issues. Read Captain Cook's suggestions and discuss their importance and implementation.
- Tommy was responsible for cleaning the ship's toilets, but he almost fell through the first day because he was not aware they were holes in the hull of the ship.

Discuss the concept of toilets on a sailing vessel. Why was the toilet area called the head? How did it work?

To find out more, see: <http://www.history.navy.mil/trivia/trivia03-2.htm>.



Other:

Nautical Knot Tying:

Sailors had to know how to tie knots properly, as the ship's safety (and theirs) often depended upon them. Rigging, sails, anchors, and mooring lines had to be secured, and these components could also affect other vital parts of the ship. Without good knots, the results could be disastrous.

For a fun activity, have students learn about different kinds of nautical knots and their uses. Let them try their hand at making the knots. A few of the nautical knots include: Bowline, Overhand Knot/Double Overhand Knot, Clove Hitch, and Figure of Eight Knot.

For more information about nautical knots and how to tie them, see:

<http://www.cccoe.net/lifeatsea/student/knots.htm>

Bullying/Violence:

In *Powder Monkey*, Tommy and his brother James are taken by force from their parents and their home on the farm by a Royal Navy press gang. The men of the press gang are very violent and even harm the parents when they try to stop the boys from being taken. Then, when they are on the ship, they are subjected to terrible treatment, beatings, whippings, bullying, and tragically, James even loses his life.

This type of treatment of one human by another human is wrong. And even though we no longer live in the times of press gangs or impressment on ships, there is still a lot of cruel behavior all around us. In fact, in schools, many children experience bullying, taunting, and even physical harm by the hand of one or more children. But here's a disturbing fact: Other kids are watching 85% of the time when one kid bullies another kid. Adults, like teachers or parents, hardly ever see a bully being mean to someone else. However, when children who are bullied do tell someone, often they are bullied even more. So, it is very important to educate our youth on this sensitive topic! It is an issue where no one needs to remain silent—especially if there is to be a change.

- Discuss the subject of bullying with your class. Make sure they know that this behavior is unacceptable and 100% intolerable. Discuss ways that children who are experiencing bullying can get help. Ask for suggestions on ways to help those who are being bullied. Ask how they would feel if it was them who was being bullied—would that make a difference in how they respond when they see it happening?
- Consider placing a 'Bully Box' in your classroom. Let students help with the project, but essentially it is a place where students can (anonymously) write down questions or concerns on a piece of paper and place it in the box. They can also alert you when they have been bullied or encountered bullying. It is a good idea to check the box every day.
- Role Play! Select a student to play the bully and another to play the victim. Add in other parts as needed, and provide a script. Afterwards, have the class talk about the bullying situation that was portrayed and what could have been done differently—or if it was handled appropriately. Have several scenarios and involve as many students as possible.

- Have students make ‘Anti-Bullying’ Posters.
- Provide writing prompts about bullying and its consequences, and have students write a short story. Or have them write a ‘journal or diary’ entry. Discuss.

Bullying Resources:

www.letsstopbullying.co.uk/

www.bullying.org

Bullying Myths and Facts PDF:

http://www.bullying.org/external/documents/Bullying.org_Bullying_Myths-Facts%20Pamphlet.pdf

www.stopbullying.gov



Book Suggestions for Further Reading:

- *Press Gang* by Nicholas Rogers
- *Pepy's Navy: The Ships, Men and Organisation, 1649-1689* by J. David Davies
- *Navy, Nation and Nelson: The Rise of British Sea Power, 1688-1815*
Quinton Colville (Editor), N A M Rodger (Foreword), James Davey
- *Stephen Biesty's Cross-Sections: Man-Of-War* by Richard Platt, Illustrated by Stephen Biesty
- *Two Years Before the Mast* (Grades 9-12) by Richard Henry Dana, Jr.
 - This book is a personal narrative of life at sea by a young man in 1834.
 - A Teacher Guide for *Two Years Before the Mast* is also available at:
<http://www.teachervision.fen.com/tv/printables/penguin/TwoYears.pdf>
- *Mathias Franey, Powder Monkey* by Ellen W. Leroe
- *The Sailor's Alphabet* by Michael McCurdy
- *The Monkey's Constitution* by Duncan Brown

- *Close to the Wind: The Beaufort Scale* by Peter Malone
- *Young Nelsons: Boy sailors during the Napoleonic Wars* by D.A.B. Ronald



Websites/Resources:

- Impressment: the Press Gangs and Naval Recruitment
www.royalnavalmuseum.org/info_sheet_impressment.htm
- Broadside. The Press Gang
www.nelsonsnavy.co.uk/broadside7.html
- Impressment | Press Gangs and Royal Naval Recruitment
www.welcometoportsmouth.co.uk/press%20gangs.html
- Press-Gangs – The Changing Face of Bristol
www.bristolpast.co.uk/press-gangs/4550804092
- A Sailor's Life For Me: War of 1812 Resources for Adults and Children
www.asailorslifeforme.org/educator/war_of_1812_resources.php

RESOURCES





POWDER MONKEY WORD SEARCH

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

WORD BANK

BOATSWAINS MATE

CANNON

CARTRIDGE

DECK

GUNPOWDER

IMPRESSMENT

JAMES KITT

MAGAZINE

MUSKET DRILLS

NAVIGATION

POWDER MONKEY

PRESS GANG

RIGGING

ROPE

ROYAL NAVY

SAILOR

SAILS

SEAMAN

TOMMY KITT

VIOLENCE

Answer Key

POWDER MONKEY WORD SEARCH

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

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