

## Additional Vocabulary and Comprehension Questions

Setting & Overview: Lancaster, Pennsylvania; London; late 1700s. Robert Fulton, lives with his mother and four siblings. He enjoys making things, such as a candlestick for his mother, ink for school, a pencil with lead, fireworks, and a paddlewheel for a boat. A redcoat teaches him to paint, and Robert makes brushes from his cat's fur. Robert leaves home at seventeen and, several years later, runs into Benjamin Franklin—literally! Franklin writes a note of introduction for Fulton, who goes to study under his childhood hero, Benjamin West. Fulton remains in Europe for twenty years and invents several devices, then returns to America. Fulton designs the first successful steamboat that sailed on August 17, 1807.

Q: Do you think the gunsmith was glad for Bob's help? Why or why not?  
[pages 8-20]

A: yes, Bob looked to see what needed to be done and helped work

Q: What does the gunsmith give Bob and why? [pages 20-31]

A: two pennies for red and black ink; he always wanted to learn to write, and is glad to support Bob in his efforts

Q: What do the children give Mother for her birthday? [pages 32-41]

A: an iron candlestick and a green candle they made

Q: How does Bob deal with the spilt and necessary ink? [pages 32-41]

A: he comes up with a solution by making his own ink

Q: How does Mother prepare Bob's school supplies? [pages 32-41]

A: she makes him a copy book out of wrapping paper and wallpaper

Q: Why does Bob dally on the way to school? [pages 42-52]

A: he finds out about the ditch Hans digs

Q: How does Bob protest his punishment? [pages 42-52]

A: he says he came to school to have something beaten into his head, not his knuckles

Q: Where do the Native American people get paints? [pages 53-64]

A: from red earth and yellow earth

With your child, do some internet research on Benjamin West, plus pictures of his portraits.

Q: How does Bob turn the black lead into a pencil? [pages 65-73]

A: he grinds the lead three times until it is fine, then adds sulfur and heats the mixture; he cuts strips of wood and burns grooves into them; then kneads and pounds the lead until it is long and slender, puts it into the grooves, and glues the wood together

Q: Why is the schoolmaster impressed by Bob's project? [pages 73-77]

A: he has only seen three pencils in his life, and this one is as good as the others

Major André is a captured redcoat who stays with Bob's friend's family and has paints and camel hair brushes. [pages 78-87]

Q: Where does Bob find paint? How about brushes? [pages 88-95]

A: red from berry juice, yellow from earth, blue from tree bark, brown from walnut hulls, and ink from tree bark; Matilda the cat's fur

Q: What do Major André and John give to Bob? Why? [pages 96-100]

A: his paint box; André is going away and Bob has skill

Q: How do the settlers celebrate July 4th? [pages 111-116]

A: they light candles in the windows, bells rings, guns pop, and drums and trumpets sound

Q: Why does the council prohibit candle burning? [pages 116-123]

A: the council recommends that the citizens not burn candles because of the heat and candle scarcity

Q: What does Bob make to celebrate the 4th and how? [pages 116-123]

A: skyrockets; he boils starch, combines it with gunpowder, adds color, then presses the rocket into pasteboard tubes

Q: How does Bob do his chores? Use adverbs to describe how he worked.  
[pages 124-132]

A: willingly, cheerfully, faithfully, etc.

Q: Why does Bob think about easier ways to move a boat? [pages 133-144]

A: boats are too hard to move by hand, he hears of someone who moved one with steam and he likes to come up with ideas

Q: How does Bob improve Mr. Gumpf's boat? [pages 145-155]

A: he attaches thin wood to spokes of a wheel, then attaches the wheel to the boat; when the crank turns, the boat moves; an oar in the back acts as a rudder

Q: Why does Franklin like Bob and how does he help him? [pages 156-167]

A: Bob invents, too, and Franklin writes a letter of introduction to Benjamin West so Bob can go to Europe and study under the painter

Q: How does Bob care for his family? [pages 168-175]

A: he buys a farm where they can live

Q: What does Bob invent while in Europe? [pages 168-175]

A: a device that raises and lowers canal boats, a machine that digs canal channels, a faster boat, devices for spinning flax and making rope, and the first submarine torpedo-boat

Q: Does the steamboat move virtually without a hitch? [pages 176-182]

A: no, the people laugh when the boat stops soon after it moves

Q: With what will the United States be connected? [pages 183-190]

A: canals

Q: What is Robert Fulton's most famous invention? [pages 183-190]

A: his steamboat sails against the wind and the tide