



Below you will find the Goals and Standards for each activity presented in the “Catch Up” with John Smith” math section of the Teachers’ Lounge at www.missmaggie.org . Here we offer you some tips, suggestions and extension ideas for each activity. You will also find an answer key if appropriate. While the activities presented are designed to be self-guided, we hope you will choose to expand on some of the topics presented through these extension ideas. Have some ideas of your own? Please feel free to share and we will post them here. Contact our Project Coordinator, Jessica Mocarski at Jessica@missmaggie.org

“Lighting the Way: Lighthouses of the Chesapeake Bay”

Goals and Standards:

Students will read about four lighthouses that stand in the Chesapeake Bay. They will use computational math skills to solve word problems about these structures. Intermediate students concentrate on one and two step subtraction regrouping, simple addition and multiplication. Primary students focus on one step regrouping and addition or simple multiplication depending on ability. The activity correlates with the Number and Operations Strand and the Problem Solving Strand of NCTM’s standards.

Tips

- Discuss reasons why these lighthouses have had so many problems.
- Encourage research about the Bay water and difficulties of the surrounding wetlands.
- Ask children to discover water depth in the Chesapeake. and look at how the varying depths make lighthouses both a necessity and cause structural problems.

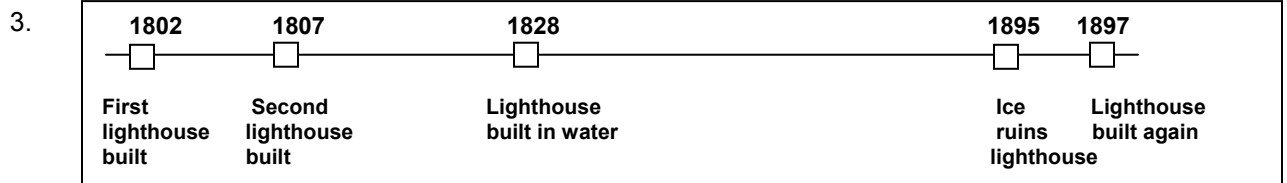
Writing connection!

- Have your class learn more about the 32 current lighthouses that stand in and around the Bay. Encourage them to write their own math problems. Then integrate...write stories about these lighthouses, draw pictures of

them, find out what it was like to be a lighthouse keeper....and on and on and on!

Answer Key:

1. 18 years
2. 78 years



4. 108 years (If it is 2005; answers will depend on current year)
5. 162 years
6. 19 years (If it is 2005; answers will depend on current year)
7. 123 years (If it is 2005; answers will depend on current year)
8. 10 times

“Ex – SPAN – D” Your Math By Traveling Over the Chesapeake Bay!

Goals and Standards:

Students will read about the two Chesapeake Bay bridges. They will use the facts to solve math problems related to bridge statistics. The intermediate activity highlights subtraction and multiplication math problems. Many of the questions involve two steps. The primary version asks children to demonstrate their knowledge of subtraction, place value, and time. Both activities stress the “how” of problem solving. This activity is also available on the Emergent level. It correlates with the Number and Operations Strand and the Problem Solving Strand of NCTM’s standards.

Tips

- Have groups of children research and report on various aspects of the bridge: fascinating stories of construction and funding the construction
- Research a famous bridge in your area. Compare the statistics of that bridge with one of the Chesapeake Bay Bridges.
- Integrate geography by studying a bridge in a far-a-way place.
- Practice metrics and have your students calculate in kilometers instead of miles.

Writing Connection!

- Put everything together in a class book: *Spanning the Globe: Bridge Math!*

Answer Key:

1. A. 15.6 miles
B. subtraction
2. A. 35 years
B. \$50,000,000
3. 24,000,000
4. A. \$73,000,000 (can be done without regrouping!)
B. 21 years
5. 11:50 am