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George F McNulty* (mcnulty@math.sc.edu), Department of Mathematics, University of South Carolina, Columbia, SC 29208, and **Nieves A McNulty** and **Douglas B Meade**. *Know a good problem?*

“A middle school math teacher and a math graduate student looking for a dissertation topic walked into a bar. Know a good problem?”

We launched the South Carolina High Energy Mathematics Teachers’ Circle, with 15 middle school teachers and a leadership team of 9, in 2012 with a summer immersion workshop. During the second year our circle expanded to 30 middle school and secondary teachers, and we continued our pattern of immersion workshop, monthly four hour Saturday meetings during the academic year, and an emergence workshop in June. We used some time to discuss classroom issues, but the heart of each of our meetings was to tackle mathematical problems in small groups. So while the teachers were intent on developing their abilities to solve mathematical problems, the leadership team was developing their abilities to invent and frame mathematical problems. This presentation will provide some lessons we have learned about devising good mathematical problems, with examples and counterexamples. (Received September 16, 2014)