

Math Teachers

- A. What does it mean to understand the concept of *composition of functions*? How do you define composition? How is the notion of function composition used in your content area? Provide examples that are relevant to courses you are teaching this year.
- B. List 3 behaviors or abilities that indicate your students have a deep understanding of the concept of *composition of functions*.
- C. Write a test question that assesses *composition of functions* at a conceptual level. Include a solution/answer for the assessment question.

Science Teachers:

- A. How do you define composition? Provide a (mathematical) definition and an example.
- B. How is the notion of function composition used in your content area? Find a science application that uses *composition of functions*.
- C. Find
 - a. Two functions, f and g such that $f \circ g \neq g \circ f$. [That is, $f(g(x)) \neq g(f(x))$]
 - b. Two functions h and k such that $h \circ k = k \circ h$. [That is, $h(k(x)) = k(h(x))$]
 - c. Explain how you went about finding these functions