UNIT 3 • MODELING AND ANALYZING QUADRATIC FUNCTIONS
Lesson 3: Interpreting and Analyzing Quadratic Functions

## Problem-Based Task 3.3.2: Window Washers Coaching

a. What are the known values?
b. What are the unknown values?
c. What type of model is needed in order to find the unknowns?
d. What is the vertex form of a quadratic function?
e. How can the known information be substituted into the vertex form of a quadratic function?
f. How can you find the value of $a$, and what is the quadratic model that represents this situation?
g. After how many seconds did the sponge fall to a height of 10 meters?
h. What is a reasonable domain of the function? How long was the sponge in the air?

