Quadratic Keywords Notes (h,K) vertex at the <u>Vertex</u>: x-value: y-value: When, is the How high object at does the max height? object get? Y-interapt How high off "How high is the the around did the seconds? object start? Plug given what is the into the graph's equation. object's starting position to tigure out time (t) , X-axis the height (x-interupt) 12nos Zeros This zero gets at the positive Use: thrown out for being When does How long is negative! the object hit the object no negative the around? in the air? scaffoldedmath.blogspot.com

Nam	ne: Date: Graphing Quadratic Equations
the r heig can	Coyote is catapulting a boulder off a cliff to hit the road runner. Let t represent number of seconds that the boulder catapults off the cliff and h(t) denote the ht of the boulder, in feet, above the base of the cliff. Ignoring air resistance, we use the following formula to express the path of the boulder: $h(t) = -16t^2 + 24t + 1$ Let t represent the cliff and h(t) denote the highest path of the boulder: $h(t) = -16t^2 + 24t + 1$ Let t represent the cliff and h(t) denote the cliff. Ignoring air resistance, we use the following formula to express the path of the boulder: $h(t) = -16t^2 + 24t + 1$ Let t represent the cliff and h(t) denote the cliff. Ignoring air resistance, we use the following formula to express the path of the boulder: $h(t) = -16t^2 + 24t + 1$
	What does the x axis represent? The y axis?
	what part of the graph is insignificant? Why? • NEALTIVE ON X-AXIS B/C NO NEGATIVE 160 • NEALTIVE ON U-AXIS B/C NO NEGATIVE 160 • NEALTIVE ON U-AXIS B/C NO NEGATIVE 160 • What was the height of the boulder before it Neight 120 was launched? • NEALTIVE ON X-AXIS B/C NO NEGATIVE 160 • NEALTIVE ON U-AXIS B/C NO NEGATIVE 160 • NEALT D/C NO NEGAT
	with this information? U-intercept
*	If Wil E. Coyote simply pushed a boulder off
/	the cliff, how would the graph look different?
E	How long will it take before the boulder reaches the bottom of the cliff? 450
A MA	What special point (Characteristic) on the graph is associated with this
	information? X-intercept
	1110111aiio11:
6.	After how many seconds does the boulder change direction?
	How high is the boulder when it changes direction? 10 teet
	What is this significant point (characteristic) called on the graph? Vertex.
7.	How high above the starting point does the boulder begin to change direction 10 feet
	If Wil E. Coyote changes his mind, how many seconds does he have to stop the
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