1145-AE-1946 Marie Jameson* (mjameso2@utk.edu). Congruences for modular forms and generalized Frobenius partitions.

The partition function is known to exhibit beautiful congruences that are often proved using the theory of modular forms. In this paper, we study the extent to which these congruence results apply to the generalized Frobenius partitions defined by Andrews. In particular, we prove that there are infinitely many congruences for $c\phi_k(n)$ modulo ℓ , where $gcd(\ell, 6k) = 1$, and we also prove results on the parity of $c\phi_k(n)$. Along the way, we prove results regarding the parity of coefficients of weakly holomorphic modular forms which generalize work of Ono. (Received September 24, 2018)