**GRASP – Code Breaking**

**TOP SECRET**

**Goal**: Your mission, should you choose to accept it, is to break the code that our field agents have intercepted and included in this report. We need you to use your cryptography expertise to help us figure out this clue, as well as encode a message that we need to send to our field agents.

**Role**: Analyst for National Security Agency

**Audience**: NSA Director, Keith Alexander

**Situation**: You are a valued member of the National Security Agency’s cryptography department. Agents in the field have just intercepted the message included in this packet, and handed it over to your team.

**Performance**: You have four essential tasks that you must do to complete this mission. First, you must decode the message that’s been encrypted in your folder. It’s essential that you decode this message – you are the only one with this particular message, and this particular encryption code, so it’s up to you. Second, you must write a one page briefing on how you decoded this message. In case you are compromised in the field, we need to know exactly how you decoded the message, what strategies you used, and how you know that the code was broken correctly. See the rubric for more information on all that needs to be included. Third, we need you to use your encryption skills to encrypt the message that’s included in your folder. This code is essential to the success of our future mission, but we need you to create a code that our enemies cannot break. You will need to submit the coded message to send to our team, in addition to the description of the code and a description of how you created the coded message. The fourth task that you must complete is creating a key to the encryption that you discover. This key must be interpretable by our team of NSA agents, but not by the enemy. See the rubric and exemplar for a better idea of what this will look like.

Good luck – the future of our country depends upon your work.

**Standards**: See Rubric attached. See a checklist on the back.

On **Thursday, August 17**, you must turn in the following 4 Items, all included in one word document (Microsoft Word).

\_\_\_\_\_ Decrypted Code – Typed

\_\_\_\_\_ One Page Explanation (typed, double spaced) of how your code was broken, including the cipher used, the process used to break your code, and key breakthroughs in the process of breaking the code

\_\_\_\_\_ Encrypted Message – Two different Encryptions of the same message

\_\_\_\_\_ One paragraph explanation for each code of how the code was encrypted, which cipher was used, scratch work if necessary.

All of these items must be submitted electronically in one word document, saved under the heading “Lastname.Firstname.CodeBreaking.docx”

Example: “Doe.John.CodeBreaking.docx”

Your project will be graded upon the rubric attached – according to the following points:

Decrypted Code and One Page Explanation: \_\_\_\_\_\_\_\_\_\_/ 40 points

Encrypted Messages (x2) and Paragraph Explanation (x2): \_\_\_\_\_\_\_\_\_\_/20 points

Work Hard Grade (turned in on time, correctly formatted): \_\_\_\_\_\_\_\_/20 points

Code Breaking Project: \_\_\_\_\_\_\_\_\_\_\_\_ /80 Points

Comments: