### **ANSWER KEY**

# **CRYPTOGRAPH-DECODING**

Communication teams must be sure to be accurate when communicating messages for other teams. Decoding practice is a good way to emphasize that messages have to be accurate. Cryptographs are word puzzles. Each letter in the puzzle represents another letter of the alphabet. Once certain letters are determined, then words can be deciphered and finally the entire puzzle.

## Activity 1: Carl Sagan Cryptograph

Even as a young boy, the famous astronomer Carl Sagan had some interesting theories about life in our universe. What were his thoughts after reading his first astronomy book? Work with your partner to decipher the puzzle. Write your answer in the box.

Hint: Each letter of the quote above represents another letter of the alphabet. Think about the letters that are used most in everyday words. Look for letters by themselves...what could they stand for? Use these clues to help you: P=L, Q=H, W=S. There are no J's, Q's, X's, or Z's in the quote. Good Luck!

"XQGS CX WGGIGZ BKWJPVXGPT FGNXBCS XJ IG XQBX CA XQG WXBNW UGNG PCHG XQG WVS, XQGNG IVWX KG OPBSGXW BNJVSZ XQGI. BSZ XQGT IVWX QBDG PCAG JS XQGI... C XQJVRQX JA CX KGAJNG C UBW GCRQX."

#### Answer:

"THEN IT SEEMED ABSOLUTELY CERTAIN TO ME THAT IF THE STARS WERE LIKE THE SUN, THERE MUST BE PLANETS AROUND THEM. AND THEY MUST HAVE LIFE ON THEM...I THOUGHT OF IT BEFORE I WAS EIGHT."

### Activity 2: Design Your Own Cryptograph

Research a famous scientist, astronaut or someone who has made a significant contribution to the space program. Along with a report, create a cryptograph of an important quote from your subject's topic. Field test the "crypto" with one of your team members and turn in their results along with the code.

	Answer:		