

Name _____

Date _____

Vocabulary: Information Theory—the big idea

Use these words to answer the questions.

- | | | | | |
|----------------|---------------|-------------|--------------|-----------------|
| A. code | G. impact | M. voyager | S. launch | Y. spectacular |
| B. soar | H. freezing | N. circuit | T. target | Z. highlight |
| C. astonishing | I. gadget | O. shun | U. satellite | AA. prestigious |
| D. cram | J. capture | P. vague | V. guarantee | BB. interfere |
| E. exposure | K. capacity | Q. absolute | W. devise | CC. feat |
| F. physics | L. spacecraft | R. crumple | X. crisps | DD. redundant |

- _____ 1. The temperature in space
- _____ 2. To fly high into the sky
- _____ 3. To reject someone/to have nothing to do with them
- _____ 4. To compress into a small space
- _____ 5. Unclear/ not precise
- _____ 6. Important/ famous
- _____ 7. A space probe sent to photograph planets in space
- _____ 8. To send a rocket into space
- _____ 9. Amazing/ awesome/ visually impressive
- _____ 10. Potato chips/ crackers/ crunchy snacks

Complete the following questions by writing True or False in the blank.

- _____ 11. The concept of describing something as true or false was the starting point for Shannon in his attempts to send messages over distances.
- _____ 12. Products have now been developed which can convey more information than Shannon had anticipated as possible.
- _____ 13. The amount of information that can be sent in a given time period is determined with reference to the signal strength and noise level.
- _____ 14. Scientists believed that both the sensors and circuits on the Voyager would last for many more years.
- _____ 15. Shannon sought to become famous by inventing the theory of data transmission.
- _____ 16. A laser projection beam was used to transmit the message at the speed of light.

- _____ 17. Despite the efforts of NASA scientists, the probe did not receive the signal.
- _____ 18. The voyager space probe was designed to take photos of Mercury, Venus and the Sun.
- _____ 19. The key aim of Shannon's research was to send a probe into space.
- _____ 20. A factor that affects the transmission of information is called noise.