

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.