

SC.912.N.1.1 – Nature of Science – Example 2 Answer

Carmen conducted an experiment to determine if listening to different types of music would affect a person's pulse. Her hypothesis was that pulse rate would change with different types of music. Each person listened to seven different selections of music for 30 seconds each. Each person's pulse was taken before the music and then after each 30-second interval of music. The pulses were taken again after the music selections were completed. Based on her experiment, Carmen concluded that a person's pulse rate changed when the person listened to different types of music.

Which component is missing from Carmen's experiment?

- A. a question
- B. a hypothesis
- C. a control group
- D. a description of the experiment

**Answer**

C. The experiment is lacking a control group.

Carmen should have also taken the pulse of people who were NOT listening to any music to make sure that a person's pulse rate would not change randomly.