

## Scanning Electron Microscope Outreach Program

**Directions:** Read each statement carefully. Select the choice that best answers each question. Place the letter of your selection in the blank next to the question number. Do your best!

\_\_\_\_\_ 1. How does the eye see an object using light?

- A) Light passes through the object.
- B) Light bounces off the object and hits the eye.
- C) The object glows and gives off light on its own.
- D) Electricity in the object emits light.

\_\_\_\_\_ 2. How does a Scanning Electron Microscope (SEM) make images of objects using electrons?

- A) Electrons pass through the object
- B) Electrons collide with the object and give off visible light to make a normal picture
- C) Object glows and gives off electrons on its own
- D) Electrons bounce off the object and hit the detector

For the next questions, rank how strongly you agree or disagree with the statement.

\_\_\_\_\_ 3. I'm thinking of choosing science as a career.

- A) Strongly agree
- B) Agree
- C) Neither agree nor disagree
- D) Disagree
- E) Strongly disagree

\_\_\_\_\_ 4. I enjoy learning new things about science.

- A) Strongly agree
- B) Agree
- C) Neither agree nor disagree
- D) Disagree
- E) Strongly disagree

\_\_\_\_\_ 5. Science concepts are valuable because they will help me in the future.

- A) Strongly agree
- B) Agree
- C) Neither agree nor disagree
- D) Disagree
- E) Strongly disagree

\_\_\_\_\_ 6. I enjoyed today's activity and found it interesting.

- A) Strongly agree
- B) Agree
- C) Neither agree nor disagree
- D) Disagree
- E) Strongly disagree

This test is not for a grade, and taking the test is voluntary.

Matching. Match the length on the left with an object that is approximately that size on the right.

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|--|--|
| 1. 1 meter                               | A. Length of the palm of your hand       |
| 2. 10 centimeters (1 decimeter)          | B. Length of a football field            |
| 3. 1 centimeter                          | C. Length of a school bus                |
| 4. 1 millimeter                          | D. Diameter of the moon                  |
| 5. 1 micrometer (1 millionth of a meter) | E. Distance a person runs in 10 minutes  |
| 6. 10 meters                             | F. Width of letter in 10 point font type |
| 7. 100 meters                            | G. Width of a human hair                 |
| 8. 1 kilometer (1000 meters)             | H. Height of a 6 year old child          |
| 9. 1 megameter (1,000,000 meters)        | I. Width of a pinkie finger              |

Any comments or suggestions? Tell us what you think here.