Name:

Assessment: What do we know at this point?
Our Nanoworld: Introduction to Nanoscience & Nanotechnology

1. In a scale from 1 (very little) to 5 (very much) how important will nanoscience be for your students?
   1 2 3 4 5
   very little very much

2. In a scale from 1(very dangerous) to 5 (not dangerous at all), how potentially dangerous you think can nanotechnology be?
   1 2 3 4 5
   very dangerous not dangerous at all

3. In a scale from 1 (most negative) to 5 (most positive) what do you think is the perception about nanotechnology of your school colleagues?
   1 2 3 4 5
   most negative most positive

4. What size range is usually referred to as “nanoscale”?
   1 Km 1cm 10^{-6}m 10^{-9}m 10^{-15}m

5. Which of these entities can be referred to as nanoscale in size? (Choose as many as applied)
   Atom Cell Quantum Dot Nanotube Molecule

6. Approximately when did scientists start working on nano-sized structures?
   1940 1959 1970 1980 1992

7. Are any of these US universities/laboratories/companies in the frontier of Nanoscience and Nanotechnology research?
   UND Rice IBM Purdue Wisconsin-Madison

8. What is the approximate wavelength for visible light?

9. We know that light sometimes behaves as a wave. What is “waving” (or oscillating) in a light wave?

10. Can we observe a nanoscale structure by increasing the magnification of an optical microscope? Why or why not?

11. Which of these instruments can be used to “see” atoms in a material? (Choose as many as applied)
Optical microscope Scanning Tunneling microscope
Scanning Electron microscope

12. What is the National Nanoscience and Nanotechnology initiative?

13. Do you think the performance of existing products will be significantly enhanced using nanotechnology in the near future?

14. In a scale from 1 (very little) to 5 (very much), do you think that you will encounter Nanoscience and Nanotechnology in your careers?

1	2	3	4	5
very little				very much