

Student Worksheet

“How Nanotechnology Works”

1. What's the smallest thing you can imagine? _____

2. How small is an atom? _____

3. Define by measurement:
 - a. Nanoscale _____
 - b. Microscale _____
 - c. Atomic Scale _____

4. Can you use a light microscope to see nanoscale objects? _____
 - a. If no, what would you use to observe the nanoscale? _____

5. What is a carbon nanotube? _____

 - a. What are some of its properties? _____

6. List some areas where nanotechnology is being used or may be used in the future:

Extension:

Using the Internet research additional applications of nanotechnology and nanoscience.

7. List (5) additional applications of nanoproducts and explain what is nano about these.

Student Worksheet

SI Prefixes Worksheet

Complete the blank with the correct prefix or unit.

1. The SI base unit for amount of a substance is a (an)_____.
2. The SI base unit for luminous intensity is a (an) _____.
3. The SI base unit for length is a (an)_____.
4. The SI base unit for time is a (an) _____.
5. The SI base unit for electric current is a (an) _____.
6. The SI unit for mass is a (an)_____.
7. The SI unit for energy a (an)_____.
8. The SI unit for volume is a (an) _____.
9. The SI unit for temperature is a (an)_____.
10. The SI unit for pressure a(an)_____.
11. One cubic centimeter is equal to _____.
12. One cubic meter is equal to _____.
13. List the seven (7) SI base unit. _____

Student Worksheet

Metric Prefix Worksheet Fill in the blank

| | |
|--------------------------------|---------------------------------|
| 1) 1 Megameter = _____ meters | 2) 1 Hectometer = _____ meters |
| 3) 1 Nanometer = _____ meters | 4) 1 Kilometer = _____ meters |
| 5) 1 Decimeter = _____ meters | 6) 1 Dekameter = _____ meters |
| 7) 1 Centimeter = _____ meters | 8) 1 Micrometer = _____ meters |
| 9) 1 Gigameter = _____ meters | 10) 1 Millimeter = _____ meters |

Fill in the blank using a metric prefix.

| | |
|-----------------------------------|-----------------------------------|
| 11) 1000g = _____ grams | 12) 1,000,000meters = _____ meter |
| 13) 0.000000001 g = _____ gram | 14) 0.1g = _____ gram |
| 15) 0.01 grams = _____ gram | 16) 0.000001g = _____ gram |
| 17) 100 grams = _____ gram | 18) 10 grams = _____ gram |
| 19) 1,000,000,000= _____ gram | 20) 0.001 gram= _____ gram |
| 21) 1 Kiloliter = _____ liters | 22) 1 nanoliter = _____ liters |
| 23) 1 millisecond = _____ seconds | 24) 1 miliamps= _____ amps |