

## Investigation and Experimentation

Name:

## Technology in Science

Period:

Use Chapter 1, Section 3 of your textbook to answer the questions below. The word banks can be used to fill out the sentences below them.

calculations   computers   data   dyes   equations   living things   properly   technology

### Section 3: Tools and Measurement (p.20)

1. For scientific work, scientists need to select and use tools \_\_\_\_\_ .

### Technology in Science (p.20)

2. Scientists use new \_\_\_\_\_ to get information that they could not get before.

### Calculators and Computers (p.20)

3. Scientists regularly collect large amounts of \_\_\_\_\_ .

4. Calculators and computers can be used by scientists to make quick and accurate \_\_\_\_\_ of data.

5. Some calculators and computers can be programmed to solve complicated \_\_\_\_\_ .

6. Scientists use \_\_\_\_\_ to share data and ideas and to publish reports of their work.

### Binoculars (p.20) - Electron Microscopes (p.21)

Read these sections, and look carefully at Figures 1 and 2. Then match the correct description with the correct term. Write the letter in the space provided.

a. binoculars

c. compound light microscope

b. scanning electron microscope

d. transmission electron microscope

\_\_\_\_\_ 7. bounces electrons off something to make a 3-D image

\_\_\_\_\_ 8. helps scientists make observations from far away

\_\_\_\_\_ 9. passes electrons through something to make a flat image

\_\_\_\_\_ 10. uses lenses to magnify small objects so they can be seen after light passes through them

11. When using a compound light microscope, items the scientist is looking at may be made more visible by coloring them with special \_\_\_\_\_ .

12. Because it kills them, \_\_\_\_\_ cannot be looked at with electron microscopes.

13. What technology would be best for observing the movements of a small living thing? Choose from the a-d list above that you used for questions #7-#10.

The best technology to use to observe the movements of a small living thing would be a \_\_\_\_\_ .

