

## BLM Answers

### BLM 9-1 What Is It Like to be a Robot?

8. a) Answers will vary but should indicate that wearing gloves makes tying shoes more difficult.  
 b) Answers will vary. Students will find wearing sticks makes tying shoes even more difficult.
9. a) yes or no  
 b) Answers will vary. Students might say robots need a greater range of movement and an ability to respond to sensory input.

### BLM 9-2 Compare Plant and Animal Cells

**Similarities:** cell membrane, cytoplasm, endoplasmic reticulum, mitochondrion, nucleus, vacuole

**Differences:** cell wall, chloroplasts, large vacuole  
 Paragraph answers are in italics.

Plant and *animal* cells have many similarities.

They both have the following 6 organelles: *cell membrane*, nucleus, vacuole, endoplasmic reticulum (ER), cytoplasm, and *mitochondrion*.

However, there are some differences between plant and animal *cells*. The *cell wall* and *chloroplasts* are found only in plant cells. Plant cells have a large *vacuole* but animal cells have several small *vacuoles*. The *chloroplast* in a plant cell is *green* in colour.

### BLM 9-3 Microscope Word Scramble

**Title:** Compound Microscope

1. eyepiece
2. objective lenses
3. arm
4. stage clips
5. stage
6. coarse-adjustment knob
7. diaphragm
8. fine-adjustment knob
9. light
10. base

### BLM 9-4 Word Puzzle

*Across*

1. nucleus
6. cell wall
8. mitochondrion

*Down*

2. chloroplast
3. cell membrane
4. vacuole

5. cytoplasm
7. ER
9. organelles

### BLM 9-5 Chapter 9 Practice Test

1. g) endoplasmic reticulum (ER)
2. a) cell wall
3. h) cytoplasm
4. b) cell membrane
5. f) vacuole
6. d) chloroplast
7. c) nucleus
8. e) mitochondrion
9. C should be circled. C shows the least amount of area of the sample.
10. a) vacuole  
 b) cytoplasm  
 c) endoplasmic reticulum  
 d) chloroplast  
 e) mitochondrion  
 f) nucleus  
 g) cell membrane  
 h) cell wall

11. **Plant Differences:** cell wall, chloroplasts, large vacuole

**Similarities:** cell membrane, cytoplasm, endoplasmic reticulum, mitochondrion, nucleus, vacuole

**Animal Difference:** small vacuoles

### BLM 9-6 Chapter 9 Test

1. f) nucleus
2. d) chloroplast
3. g) cell wall
4. a) vacuole
5. e) mitochondrion
6. c) cytoplasm
7. h) endoplasmic reticulum (ER)
8. b) cell membrane
9. A should be circled. A shows the least amount of area of the sample.
10. a) nucleus  
 b) vacuole  
 c) endoplasmic reticulum  
 d) cytoplasm  
 e) mitochondrion  
 f) cell membrane

11. **Animal Difference:** small vacuoles

**Similarities:** cell membrane, cytoplasm, endoplasmic reticulum, mitochondrion, nucleus, vacuole

**Plant Differences:** cell wall, chloroplasts, large vacuole